Government of Andhra Pradesh

Primary Sector Mission

Proceedings of

Action Plan Preparatory Workshop

28–29 April 2015
ICRISAT-Patancheru, Telangana

ICRISAT
Science with a human face

International Crops Research Institute
for the Semi-Arid Tropics
Patancheru 502 324, Andhra Pradesh, India

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Editors
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Acknowledgements

We sincerely thank the Government of Andhra Pradesh for the funding support in organizing the workshop. Special thanks to Special Chief Secretary and Agricultural Production Commissioner Mr. SP Tucker and all Secretaries for their kind support and help. We sincerely recognize the support received from all line department staff in preparing action plan and their participation in the workshop. The participation of ICAR (Indian Council of Agriculture Research) institutes, Universities, research organizations and NGOs is highly appreciated.

Government of Andhra Pradesh

Primary Sector Mission

Proceedings of Action Plan Preparatory Workshop

The Andhra Pradesh Primary Sector Mission was launched during October 2014 is moving forward to transform agriculture and allied sectors in the state. The Government of Andhra Pradesh is committed to transform the primary sector into an equitable, scientific, and prosperous and climate smart sector. As part of the Vision 2029, the stress is on increasing productivity of the primary sector; mitigating the impact of droughts through water conservation and micro- irrigation; postharvest management to reduce the wastage; and establishment of processing, value addition capacity and supply chain of the identified crops.

ICRISAT has been identified as the knowledge partner and is playing a crucial role in providing technical assistance to the Government of Andhra Pradesh in steering this process of Primary Sector development along with Consultative Group for International Agricultural Research (CGIAR) institutions, State Universities of Agriculture, Horticulture, livestock and fisheries. One of the objectives of this initiative is to establish pilot sites of 10,000 ha each in 13 districts to operationalize the convergence of primary sector for increasing productivity, profitability and sustainability through science- led development and climate smart agriculture.

A two day Team building and action plan preparatory workshop was held during 28-29 April 2015 at ICRISAT Patancheru. About 220 GoAP primary sector officials from 13 districts, head quarter and ICRISAT along with other CG centers scientists attended the workshop. Representatives from NABCONs (NABARD Consultancy services) from NABARD (National Bank for Agriculture and Rural Development), Centre for Good Governance, State Universities of Agriculture, Horticulture, Livestock and Fishery also participated and deliberated extensively on different issues of primary sector and prepared district level action plan that would serve as basis for Mandal level action plan preparation.

During the first day, the state plan worked out through extensive discussions during past couple of months involving state, some district officials was shared with all the participants. The important growth engines of this plan in primary sectors comprise agriculture, horticulture livestock and fisheries.

In agriculture, the target is to enhance GVA (Gross Value Addition) by 5925 cr from 44565 cr during 2014-15 to 50490 cr during 2015-16. The focus is to achieve this is through adopting soil test-based application of micro- & secondary nutrients (17+3.5 lakh ha under vegetables and horticulture), enhancing area under irrigation (2 Lakh ha) and other best practices. An investment of about 250 cr in micro-nutrients is expected to add GVA by more than 2000 crores. Maize is becoming important growth engine and its area is to be enhanced from 3 Lakh ha to 4 Lakh ha in depleting groundwater areas. Varietal replacement in paddy (2.5 Lakh ha), maize (1 Lakh ha), groundnut (4 Lakh ha), along with high density planting in cotton (0.03 Lakh ha) are other major intervention.

Horticulture sector is targeting GVA by 90 crores during 2015-16. Banana, mango, chillies, tomato are major growth engines. The strategy include to enhance area under such high value crops and promoting practices like Micro Irrigation, shade nets, Post Harvest infrastructure.

Under APPSM, we have adopted a concept of developing 10000 ha representative areas in the districts to be developed as Pilot sites of Learning/Bright Spots, and the plan is to expand such concept to satellite regions.

The concept of FPOs (Farmer Producer Organizations) is being promoted to strengthen smallholder farmers across the value chain and enhance their bargaining power through collective action. One FPO comprises of about 50-60 Farmers Interest Groups with 1000 farmers in 10-20 villages. The target for 2015-16 is to develop 76 FPOs covering 2.2 Lakh farmers across various commodities like banana, dairy, chillies, maize & other crops, fisheries.

Under livestock sector, milk, meat and egg are major growth engines. The growth in contribution to GSDP (Gross State Domestic Product) targeted in livestock sector is 24.2% during this year. The targeted intervention to achieve stipulated growth are –fodder promotion, processing & conservation, promotion of dual purpose crops, promoting concentrates, AI using sexed semen, developing procurement, processing & marketing facilities, credit through banks, animal health and CB. The targeted % increase in value addition during 2015-16 is – 26% in milk, 24% in meat and egg. Similarly the targeted growth in fisheries is 21%. The important interventions include promotion of good species, mechanization, healthcare, cage culture, deep sea fishing and CB. In case of forest, the target is to enhance GVA from 460 cr during 2014-15 to 1284 cr during 2015-16. To support these growth engines, ambitious plans are there during 2015-16 for mechanization and micro irrigation (133,000 ha).

After discussion on the state plan, district-wise group discussions were conducted to prepare district level plan of action. The plans are developed in line with the strategy and measurable indicators.

Mr. SP Tucker, Special Chief Secretary to GoAP, Planning Department and Agriculture Production Commissioner, in his remarks highlighted the issues of low productivity, water scarcity, droughts and large dependent population on primary sector in new state of Andhra Pradesh. He highlighted the variability in productivity across different regions within the state and as compared nationally and internationally. He urged all to probe into such issues, chalk out comparisons with different growth engines and accordingly prepare district plans to achieve double digit growth in primary sector. He particularly highlighted the issues like micro nutrient deficiencies, high fertilizer application in coastal areas, low milk yield, expansion of maize in water depleting regions, quality issues to target international markets, promotion of banana, vegetables. He guided some groups to come up with clear strategy in respective sectors. He focused on pilot sites to be developed as labs of achieving faster growth and it will be expanding to adjoining areas. He highlighted on planning by considering cropping system based market behavior. He gave a clear message to become the one of the best three states by 2022.

The Commissioner, Agriculture assured convergence for providing the micro- & secondary-nutrients for vegetable and horticultural crops by the Department of Agriculture and he assured to bring circular in this context.

The district level sector-wise action plan and pilot site action plan were presented by district level department heads and ICRISAT district coordinators, respectively. These are draft action plans prepared to highlight possible interventions in each of the district and pilot site and to improve further with suggestions. The important outcome of these presentations is that there should be commonality across districts and pilot sites and growth engines need to be prioritized based on their contribution to the district as well as pilot site and a common summary table for reporting the GVA was prepared and circulated among all the participants to maintain uniformity across the sectors and districts.

As guided by Mr. Tucker, the respective commissioners also interacted and guided their team to come up with distilled plan of action on respective sectors. In breakout groups of four departments led by the respective Commissioners also deliberated the policy and institutional bottlenecks to realize the goal along with the work plans budgetary needs were also worked out. The discussion basically revolved around on how to revive the sectors, what strategies/modalities are required and expert suggestions to achieve double digit growth in the respective sector.

The major issues discussed in agriculture sector deliberated during the discussion includes seed replacement, especially paddy seed replacement in North Coastal districts as the productivity is very low compared to other districts, enhancing resource use efficiency by introducing improved practices, rejuvenation of soil analytical laboratories, micronutrient procurement and quality assessment, strengthening of extension services.

Similarly, in horticulture sector, introducing micronutrients package for banana and papaya for improving productivity, individual farm ponds with enhanced subsidy from 50-75%, pre-cooling units for Tomato and assistance for transportation in Glut periods, INM (Integrated Nutrient Management) & IPM (Integrated Pest Management) Package for Chillies, Training Chilly farmers on reduction of pesticide residues and Aflatoxin, subsidized double drip laterals for Acid lime, etc.

Livestock and Dairy sector addressed issues like establishment of a system for declaring Milk Production Cost on seasonal basis, promotion of decentralized milk processing and marketing system, Establishment of dairy consortiums at State and District level with major stakeholders to address issues related to milk production and post-production activities, rationalization of Price payment to the dairy farmers by controlling malpractices, on-line monitoring, etc.

As fishery sector is one of the fast growing sectors without substantial public investment, the discussion focused on strengthening the sector with new policy guidelines to help farmers to produce more and increase their income. The major issues discussed include, insurance for the fishing farmers and modalities on the premium, beneficiary contribution and Govt. contribution, suitable incentives to bring abandoned area into culture, increasing

Skilled manpower, treating aquaculture on far with agriculture, establishing fishery market to increase per capita consumption, exploring deep sea fishing potential, etc.

Open house suggestions and ideas from the district officials were sought and all officers participated actively and interacted with the Special Chief Secretary and Agricultural Production Commissioner Mr. SP Tucker, Special Chief Secretary Agriculture Mr. Vijay Kumar, Principal Secretary Fisheries Mr. Manmohan Singh, Commissioner Agriculture Mr. Madhusudan Rao, Commissioner Horticulture Smt. Usha Rani, Commissioner Marketing Dr. Kishore and Dr. Suhas Wani from ICRISAT.

Recommendations

- An urgent attention to ensure suitable marketing and price support is needed.
- Efforts are needed to ensure marketing support as well as pursue value-chain and processing through public-private partnership (PPP) to benefit farmers.
- Post-harvest losses need to be tackled to minimize financial losses through developing infrastructure for drying, processing, storage and value addition.
- Necessary financial and human resources support need to be ensured through fast tracking policies and clearances by the concerned departments.
- Trained human resources to achieve and sustain the growth of each sub sector.
- Urgent need to pursue the development of training centers for the farmers and skill development policy for Primary Sector.
- Weekly video or tele conference involving key decision making officials at state and district level to monitor progress
- Seed replacement is one of the important interventions which need to be tackled immediately through supply of good quality seeds as the availability of seed is the major constraints.
- As DSR (Direct Seed Rise) helps to overcome labour shortage and efficient use of water resource, area under DSR need to be increased.
- As the productivity of paddy in North Coastal districts (1.7 t/ha) is below the state average of 3.6 t/ha, these districts should be given priority for paddy seed replacement with improved variety seeds with higher yield.
- The state of Andhra Pradesh has number of soil analytical laboratories. However, most of them are dysfunctional. Therefore, these laboratories need to be rejuvenated.
- Medium duration of varieties are to be made available to increase crop yield and enhance the resource use efficiency.
- Micronutrients procurement and quality assessment need to be fast tracked to ensure timely application of micronutrients by the farmers.

- As it is evident that soil-test-based micronutrient application enhances the yield, soil analysis has to be completed well in advance to prepare recommendations and distribution of soil health cards for efficient use of micronutrients.
- An effective extension system provides good basis for effective implementation of activities on ground. Therefore, extension systems need to be strengthened to cater the needs of farmers and stakeholders.
- Micronutrients package for Banana and Papaya for improving productivity
- Supply of seedlings instead of Hybrid seed for Tomato, Chillies and other vegetable crops
- More emphasis on individual farm ponds, enhancing subsidy from 50-75%
- Trench cutting for micro-irrigation convergence with MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) for labour component
- Pre-cooling units for Tomato and assistance for transportation in Glut periods
- INM & IPM Package for Chillies, Training Chilly farmers on reduction of pesticide residues and Aflatoxin
- In key performance indicators, Targets under Poly houses and shade nets is higher and should be revised. Banks should finance without collateral security i.e. Urban property
- Commissioner marketing explained about sanction of Rs 18.56 cr. for post-harvest infrastructure in market yards
- Allowing subsidized double drip laterals for Acid lime from 4th year and supply of 16 mm lateral instead of 12 mm
- Establishment of a system for declaring Milk Production Cost on seasonal basis by competent authority ,which helps to evolve rational milk pricing policy
- Promotion of decentralized milk processing and marketing system to market milk to ensure additional price to farmers
- Establishment of micro BMCUs (Bulk Milk Cooling Units) (500 to 1000 Liters capacity) so as to have direct market linkage
- Establishment of dairy consortiums at State and District level with major stakeholders to address issues related to milk production and post-production activities
- Rationalization of Price payment to the dairy farmers by controlling malpractices
- Limit on Number of animals should be removed
- Online monitoring
- Tag applied by any Insurance company shall be accepted by all other companies for future renewals
- Claim settlement should be with in fortnight
- Insurance companies are not coming forward to insure the Sheep and Goat

- Due to migration it is not possible the Veterinarian and Insurance companies to reach the animals after death.
- Insurance for the fishing farmers need to be developed, modalities on the premium, beneficiary contribution and Govt. contribution for both Shrimp and fish crops to be assessed.
- The abandoned area in the shrimp culture is to be brought into culture by providing suitable incentives. Incentives need to be worked out to bring more abandoned areas into culture.
- Skilled manpower required for the fishery sector is assessed and accordingly establishment of fishery polytechnics, increase in number of seats in Fishery colleges is to be worked out.
- Currently, aquaculture is considered as commercial agriculture and a detailed report is to be worked out to treat aquaculture on far with agriculture.
- Fisheries marketing to be developed to increase per capita consumption and to devise the strategies as per supply or production.
- Deep sea fishing potential to be exploited by conversion of the existing vessels into tuna long-liners.

Concluding Session

In concluding session Dr. Peter Carberry, Deputy Director General, ICRISAT, welcomed the Hon'ble Minister of Agriculture, horticulture, Animal Husbandry, Fisheries and Marketing and assured full support for the mission. He appreciated the efforts of the Special Chief Secretary Mr. SP Tucker for meticulous planning of the mission.

During interaction of the workshop participants with honorable agriculture minister, Sri Pattipati Pulla Rao, Dr. P V Satyanarayana, ADR, Maruteru, W Godavari, emphasized to give importance to pulses during rabi season in rice fallows as they are cultivated in 12 lakh hectare areas. He also requested for substantial investments in research to sustain the productivity in long run. Mr. Sarma NDRK, emphasized the need for releasing canal water early, so that cropping intensity and productivity of Rabi crops will be enhanced.

Mr. M Venkateshwarlu, Project Director, Micro Irrigation Project, Anantapur said that to achieve double digit growth, there is lot of scope in horticulture and requested to provide technical staff to achieve the targets as horticulture crops fetch more income in less area. Mr. Ramana, Assistant Director Horticulture, Anantapur requested to provide water soluble fertilizers for fertigation to reach 100% farmers. Also requested to provide secondary, micronutrients and mulching materials for horticulture crops. Request made to enhance subsidy on farm ponds from 50 per cent to 70 per cent.

Joint Director Animal Husbandry, Chittoor said that livestock is playing crucial role in providing organic manures for crops whereas importance to be given for fodder production as horticulture sector is hampering fodder production and mixed farming to be promoted to address this issue. He also requested for developing pricing policy for milk. JD AH, East Godavari told that input cost of poultry is increasing and farmers to be

supported by giving subsidy on feed and power. Need for developing processing industries for meat and egg. There is lot of demand for buffalo meat and policy to be developed for male buffalo slaughter.

Fisheries department officer requested for developing pricing policy as well as to explore marketing opportunities. He also requested to treat fisheries on par with agriculture to provide incentives to farmers and fishermen. There is need to enhance processing units to avoid fungus development which fetches low price. Lot of problems in aqua culture and there is no mechanism to solve the problems. Research and extension to be developed to support the farmers. Lot of shortage of technical manpower and there is need to increase seats in the colleges as well as staff.

Hon'ble Shri. Prathipati Pulla Rao, Minister for Agriculture, Horticulture, Animal Husbandry, Fisheries and Marketing addressed the participants during the concluding session and emphasized on the ambition of Hon'ble Chief Minister on achieving 24 per cent growth as an example of Madhya Pradesh and to become top 3 performing states in India. He emphasized on the following issues:

- Participants to work together to achieve higher level growth rate with science led interventions in the primary sector Mission and he urged that Andhra Pradesh should become one of the top three states in the country.
- Emphasized the urgency for analyzing 4 lakh soil samples and distributing soil health cards to farmers on war footing before onset of the rainy season.
- Micronutrient application is the critical areas we need to focus on and the Government is committed to full fill the budgetary requirement necessary for this purpose. Deficient micronutrients will be provided to farmers on 50% subsidy as the budget was already allocated.
- Special officer of primary sector will be appointed and posted in all the districts for effective coordination and monitoring.
- Officers should build the confidence among farmers using their vast experience, skills and motivate the farmers towards the goal of achieving higher benefits.
- Fodder deficit in Rayalseema must be overcome using the new fodder technologies, storage, etc.
- Advised all the participants to share the knowledge gained during two day workshop with other district and Mandal level officers to make this mission successful and achieving the double digit growth in the state.
- The Hon'ble Minister stressed on conducting workshops and campaigns to educate the farmers to adopt the technologies and emphasized on exploring the marketing opportunities to get more income and benefits to more number of farmers.
- He also assured processing industries, cold storages facilities to be developed and incentives will be provided to processing and marketing.

The Hon'ble Minister highlighted the technical support and guidance of ICRISAT for the mission and congratulated Dr. SP Wani and team as well as Mr. SP Tucker for identifying the growth engines in all the sectors. He promised that the Government will do the needed

changes in policies to remove the bottlenecks and provide full support to the mission.

Dr. Suhas Wani and Dr. KV Raju guided the deliberations during the workshop. The workshop concluded with vote of thanks by Dr. KV Raju, Assistant Director, ICRISAT Development Centre.

Workshop Events through Lens

Agriculture Minister Prathipati Pulla Rao interactive with DDG Peter Carberry and SP Wani

Peter Carberry and SP Wani welcoming Prathipati Pulla Rao

KV Raju, SP Wani, Prathipati Pulla Rao, Peter Carberry

Manmohan Singh, T Vijay Kumar, Peter Carberry, Prathipati Pulla Rao, SP Tucker and SP Wani

Prathipati Pulla Rao addressing the participants

Peter Carberry addressing the participants

SP Tucker addressing the participants

SP Tucker Interacting with participants

SP Wani addressing the participants

SP Tucker interacting with participants

SP Wani interacting with participants

Interaction with participants

Interaction with Participants

Presentations and Group discussions with participants

Group discussion with ICRISAT Scientists & Workshop participants

Minister Sri Prathipati Pullarao visit of SAT Venture

Government of Andhra Pradesh
Primary Sector Mission

Action Plan Preparatory Workshop

28–29 April 2015
Ralph W Cummings Auditorium
ICRISAT, Patancheru

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PROGRAM

Tuesday, 28 April 2015

0830–0900	Registration	

Session 1 Inaugural Session

0900–0930	Welcome and Objectives	KV Raju
0930–1000	State Level Action Plan Presentation	
1000–1030	*Health break*	
1030–1330	Groups: Sector-wise Preparation of District Level and Mandal Level Plans	
1330–1430	*Lunch break*	
1430–1500	Welcome - Primary Sector & Pilots	SP Wani
1500–1530	Opening Remarks (Purpose and Plan of this Workshop)	SP Tucker

Session 2 Technical Session I

Chair : SP Tucker
Rapporteur : Girish Chander

1530–1550	District Action Plan, Kurnool	JDA, Kurnool
1550–1600	Pilot site Action Plan, Kurnool	P Pathak
1600–1610	Discussions	
1610–1640	*Group photograph & Health break*	
1640–1700	District Action Plan, Guntur	JDA, Guntur
1700–1710	Pilot Site Action Plan, Guntur	G Pardhasaradhi
1710–1720	Discussions	
1710–1740	District Action Plan, Kadapa	JDA, Kadapa
1740–1750	Pilot Site Action Plan, Kadapa	Girish Chander
1750–1800	Discussions	
1800	*Workshop Dinner*	Mary Cummings Park

Wednesday, 29 April 2015

Session 3 Technical Session II

Chair : Sanjay Gupta
Rapporteur : KH Anantha

0600–0700	Morning Walk Starts from Guestel	
0700–0800	*Breakfast*	*Banquet Hall*
0800–0810	Over View of Day 1	
0810–0830	District Action Plan, Nellore	JDA, Nellore
0830–0840	Pilot Site Action Plan, Nellore	Gajanan LS
0840–0850	Discussions	
0850–0910	District Action Plan, Visakhapatnam	JDA, Visakhapatnam
0910–0920	Pilot Site Action Plan, Visakhapatnam	KH Anantha
0920–0930	Discussions	
0930–0950	District Action Plan, West Godavari	JDA, West Godavari
0950–1000	Pilot Site Action Plan, West Godavari	Kaushal K Garg
1000–1010	Discussions	
1010–1040	*Health Break*	
1040–1100	District Action Plan, Krishna	JDA, Krishna
1100–1110	Pilot Site Action Plan, Krishna	Ch Anitha
1100–1120	Discussions	
1120–1140	District Action Plan, Srikakulam	JDA, Srikakulam
1140–1150	Pilot Site Action Plan, Srikakulam	Ch Srinivasa Rao
1150–1200	Discussions	
1200–1220	District Action Plan, Ananthapur	JDA, Ananthapur
1220–1230	Pilot Site Action Plan, Ananthapur	CS Pawar
1230–1240	Discussions	
1240–1300	District Action Plan, East Godavari	JDA, East Godavari
1300–1310	Pilot Site Action Plan, East Godavari	Rajesh Nune

1310–1320	Discussions	
1320–1420	*Lunch Break*	
1420–1440	District Action Plan, Chittoor	JDA, Chittoor
1440–1450	Pilot Site Action Plan, Chittoor	P Narasimha Rao
1450–1500	Discussions	
1500–1520	District Action Plan, Vizianagaram	JDA, Vizianagaram
1520–1530	Pilot Site Action Plan, Vizianagaram	LS Jangawad
1530–1540	Discussions	
1540–1600	District Action Plan, Prakasam	JDA, Prakasam
1600–1610	Pilot Site Action Plan, Prakasam	
1610–1620	Discussions	
1620–1630	*Health Break*	
1630–1700	Crop Plans by NABCONS	Malkit Singh
1700–1730	Monitoring Management by Center for Good Governance	Vijay Kumar Reddy
1730	Closing Remarks	SP Tucker

29-04-2015 – Minister's Program

Master of Ceremonies: Suhas P Wani

1530–1540	Welcome	Suhas P Wani
1540–1545	Presentation of Bouquet to Hon'ble Agriculture Minister	Peter Carberry
1545–1555	Welcome New Members in Primary Sector - SP Tucker - T Vijay Kumar	
1555–1610	Highlights from the Team Building and Action plan Preparatory Workshop	KH Anantha
1610–1620	Address by DDG	Peter Carberry
1620–1640	Address by Special Chief Secretary on Primary Sector Planning Workshop and Recommendations	SP Tucker
1640–1700	Address by Hon'ble Agriculture Minister	Sri P Pulla Rao
1700	Vote of Thanks	KV Raju

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Power Point Presentations

Primary Sector Mission

Action Plans & Way Forward

28 April 2015

Andhra Pradesh

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Double Digit Growth Plan for Primary Sector Prepared

	₹ in Crores	₹ in Crores
Primary Sector	138105	164694 (19.2% Growth rate)
Agriculture	44565	50490 (13.3%)
Horticulture	35417	42686 (20.5%)
Livestock	36798	45684 (24.1%)
Fisheries	21325	25834 (21.1%)

How We will Achieve Double Digit Growth

Two Prong Strategy
- Scaling-up with low hanging fruits technologies
- Innovation at pilot sites to sustain growth

Converge → Consortium → Collective Action → Capacity Building

Synergy → Partnerships → Farmers Producers Organizations → Skill development

Efficiency (Production) → Value addition → Profits ← Employment

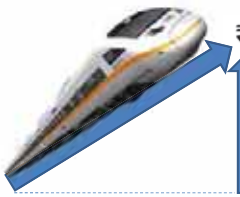
What We will Need to Do to Achieve Double Digit Growth

Innovate
- Technologies
- Partnerships
- Institutions
- Policies

Converge
- Schemes
- Departments
- Resources
- Communicate

Efficiency
- ICT
- Science-led Interventions
- Value Addition
- Market Linkages

Major Growth Engine Primary Sector Development



₹ 164694 Crores

19.2% Growth rate

₹ 138105 Crores

Consortium Approach

- Workplans preparation
- Technical backstopping
- Innovations
- Monitoring indicators
- Enabling PPPs

Strategy

Scaling- up with low hanging fruits and Innovations in Pilot sites

- Convergence
- Consortium
- Campaigns for awareness building
- Effective delivery systems
- Value chains and market linkages
- Enabling policies and institutions
- Effective monitoring

Networking and Team Building

- Number of workshops with stakeholders
  - Public private partnerships
  - State level planning
  - District level planning
- Discussions with
  - Line departments
  - State universities
  - Planning department

Digital Agriculture

- Data capturing and archiving
- Analysis and decision making
- Planning various interventions
- Knowledge delivery systems
- Monitoring and evaluation thru Dashboard
- Farmer to farmer ideas

Field Level Capacity Development

- Pilot sites as sites of learning
- Seeing is believing
- Hands on training (Master trainers and Lead farmers)
- Skill development specialized agencies
  - Mechanization
  - ICT-enabled extension
  - Village seed banks
  - Microenterpreunership

Agriculture

Soil Mapping for Nutrient Deficiencies

- Widespread deficiencies of multiple nutrients upto 95% in soils of AP are observed
- Good yield responses (20 to 120%) to application of balanced nutrients are recorded thru Bhoochetana in A.P. and Karnataka
- Soil sample collection and analyses by DoA is in progress but excluding boron
- Incentivised micronutrient supply based on soil mapping along with targeted awareness building will increase crop productivity by 10 per cent on 30.6 lakh ha

Macro Benefits with Micronutrients

- Incentive of ₹150 crores to farmers will generate ₹ 2275 crores from 3.06 M ha
- Additional environmental benefits

Crops	Area for micro & sec- nutrients (Lakh ha)	Cost (crore)	Addition in value (crore)	Benefit to cost ratio
Benefits with direct application of nutrients				
Agricultural crops (paddy, maize, groundnut, cotton, other)	21.0	260	1028	
Horticultural crops (Chillies, tomato, onion, banana, papaya, cashewnut, oilpalm, mango, sweet orange)	3.5	40	917	
Residual benefits in rabi season				
Agricultural crops (paddy, maize, groundnut, cotton)	5.0	0	214	
Horticultural crops (Chillies, tomato)	1.1	0	116	
Total	**30.6**	**300**	**2275**	**7.58**

Enhancing Rice Productivity through Mechanisation and Improved Cultivars

Current Rice Yields 3.4 t ha^{-1} → Achievable yield 6.5 t ha^{-1}

- **Improved cultivars**
  - Submergence tolerant (Sambha masuri sub1, Swarna sub1)
  - Salinity tolerant (DRR dhan 39)
  - Drought tolerant (IR64 drt1)
- **Mechanization**
- **Direct seeded rice**
- **Alternate drying and wetting**
- **Balanced nutrient application**

Sustainable Intensification of Maize

Intensification of area and productivity

Rainy season
- Bridging yield gap (3.7 to 7 5 ha^{-1})
- Drought tolerant CVs
- Balanced nutrient

Rice fallows
- Minimum tillage
- Mechanization
- Balanced nutrient
- Area expansion by 50% (3.1 L ha rice fallows)

Village Based Seed Enterprise

Seed Consortium

FPOs/ MACS	ANGRAU/ ICRISAT	SSDC/DoA
Seed production Farmers participatory selection of varieties Selection of villages Selection of seed producers	Identification of suitable CVs Supply of breeder foundation seed to FPO Capacity building 4 GAPS	Seed buy-back agreement with FPO Seed processing, seed quality and storage Marketing

Horticulture

Horticulture-Strategies

Chillies	Vegetables	Coconut	Oilpalm
Integrated Pest Management Capacity Building for 2 lakh Chillies Farmers Custom Hire Center at every village • Poly Sheets • Solar Dryers • Transplanter Export Promotion	Poly House and Shadenet House Cultivation Transportation of Vegetables through Railway wagons Pandal and Trellies Cultivation Formation of FPOs	Cocoa as intercrop Custom Hire Centers Harvesters Transportation of coconut through Railway wagons By Products Neera Extraction Area Expansion	Inter crop Drip irrigation Custom Hire Centers

Horticulture-Increasing Productivity and Production

Short-term

- Technology adoption
  - Tissue Culture Banana with drip irrigation- 20,000 ha.
  - Poly houses in 600 acres to grow
  - Mulching in 6,000 ha increases yield by 20%.
- Productivity increase 25-30%
  - Good agriculture practices (7000 ha.) and IPM (8000 ha.)
  - Capacity building in new technologies
- Area expansion of one Lakh ha/year under APMIP
- Develop good knowledge delivery to farmers through call centers, ICT etc.
- Vegetable cultivation
  - in urban areas- e.g. Vijayawada, Visakhapatnam, Tirupathi and Guntur.
  - in Lanka Villages of Godavari Districts
- Value addition
  - Coconut by-products
  - Transportation of Tomato & Coconut through Railway wagons (Cold Wagons)
- Explore export potential of nurseries in Kadiyam (East Godavari District)

Horticulture: Long-Term Action Plan

- Area Expansion
  - Cocoa area as intercrop in coconut gardens
  - Oilpalm in 10,000 ha
  - Coffee in 40,000 ha
  - Pepper in 3,600 ha cultivation in tribal areas
- Post Harvest Infrastructure
  - Pack Houses (400 Nos)
  - Cold Storages (6 Nos)
  - Cashew Processing Units (10 Nos)

Livestock

Livestock- Low Hanging Fruits

Short Term Strategy

- 10 Lakh high yielding cattle with 6 L d^{-1} → 8 L d^{-1} / 20 L d^{-1} — Imp. Feeding regime
- 500 Progressive dairy farmers @ 200 L d^{-1} → 1 L d^{-1} → 2 L d^{-1} Credit supply
- 21,000 SHGs to work on Dairy activity through NGO's/FPOs
  - Produce 10 LLPD

Medium Term Strategy

- Better management of (3 Lakh) Heifers of high genetic merit
  - Between 18-20 months for early conception (Sunondin)

Long Term Strategy

- Better management of (5 Lakh) improved heifer calves for early maturity

Fodder Production

- Implement Effective Feed and Fodder Policy
  - Ensure availability and access during drought and summer
  - Enable production & preservation of fodder
  - Improve post-harvest management suitable to agro-ecological regions of state
  - Creation of fodder banks & storage facilities

Fodder Management + Fodder Banks for Rayalaseema Districts

- **Better Utilization of maize stover**
  - Research support from ICRISAT on buy back tie up in convergence with Agriculture Dept.
- **Baling of Paddy Straw**
  - Surplus pockets to stock the crop residue in fodder bank for utilization in fodder deficit areas.
- **Commercialization of maize silage**
  - Imported technology on PPP.
- **Effective utilization**
  - Locally available crop residue and feed ingredients through Ration balancing programme of NDDB.

Livestock-Action Plan-2
Meat and Egg Production

Activity	Technological Interventions
Through Budgeted Items	
Management	Productivity enhancement • Through replacement of Breeding rams in • 2760 Sheep & Goat units
Through stimulated growth	
Awareness and Capacity Building	Training 4 Lakh shepherds in good management practices • Replacement of breeding rams, • ram lamb rearing, • sheep & goat deworming, • Mineral supplementation, • foot baths, • rejuvenation of grazing lands etc.,
Credit facilities	• Meat outlets • Meat processing units • Mobile Health care • Cold storage facilities
Power Tariff	Supply of Power to poultry farmers on average pooled cost

Fisheries

Fisheries- Action Plan -1

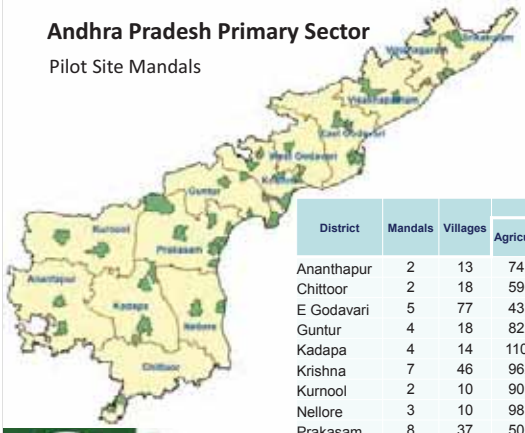
Sl. No	Growth Engines	Action Plan	Estimated additional fish Production	Estimated Total Production	Budget (Rs in Crores)
1	**Fresh water Fisheries Sector**		1.50 LT	15.34	55.54
	a) Reservoirs Total no. 104 Area --2.40 lakh ha Productivity- 85 kg/ ha Anticipated- 300 kgs	• Cage culture • Stocking of advance fingerlings • Captive nurseries • Stocking of scampi culture	0.0516	0.0720	
	b) Tanks Total No. 25400 Area- 3.38 lakh ha Productivity- 0.75 ton Anticipated- 1.0 ton	Stocking of advance finger lings Desilting, deepening of tanks under MGNREGS Scampi seed stocking	0.0875	3.38	
	c) **Aquaculture** Total No. 42400 Area – 1.25 lakh ha Productivity- 8.2 Anticipated- 9.2	Brood stocks banks, hatcheries establishment Amendments to regularization of tanks, AP Aquaculture seed Act 2006	1.25	11.50	
	d) **Lakes and rivers** Kolleru lake-0.90 Lakh ha Rivers- 11,514 kms	Desilting, deepening, stocking and seed ranching	0.11	0.39	

Fisheries- Action Plan -2

S.No	Growth Engine	Action Plan	Estimated additional fish Prodtn (LT)	Estimated Total Prodtn (lakh ton)	Budget (Rs Cr)
2	**Brackish water** Area 0.37 lakh ha Productivity-2.85mt Anticipated- 5 mt/ha	• Expansion of culture area for 1000 ha • Mechanization • Promotion of alternate sps. (Sea bass, mud crab) • Domestic market promotion • Brand Andhra • Capacity Building	0.90	1.95	73.06
3	**Marine Fisheries** Craft- 29200 Ave. catch-16.26mt Anticipated– 16.6mt	• Promotion of deep sea fishing • Establish fish landing centers • Establish markets, value addition facilities	0.10	4.85	58.58

Andhra Pradesh Primary Sector

Pilot Site Mandals



District	Mandals	Villages	Pilot Site Area (ha)			
			Agriculture	Horticulture	Fisheries	Total
Ananthapur	2	13	7472	1127	0	**8599**
Chittoor	2	18	5968	4417	0	**10385**
E Godavari	5	77	4371	4791	2163	**11325**
Guntur	4	18	8226	4761	217	**13204**
Kadapa	4	14	11000	900	3	**11903**
Krishna	7	46	9627	350	2000	**11977**
Kurnool	2	10	9090	337	0	**9427**
Nellore	3	10	9854	1926	367	**12147**
Prakasam	8	37	5000	2000	3898	**10898**
Srikakulam	3	44	6337	3577	154	**10068**
V.patnam	3	23	7361	3155	360	**10876**
V.nagaram	2	23	6910	1584	451	**8945**
W Godavari	2	12	8558	4245	1022	**13825**
Total	**47**	**356**	**95226**	**36521**	**10481**	**142228**

Key Interventions at Pilot Sites

Sr No	Activity	Output Indicators
1	Climate analysis and awareness	• Climate databases and variability for all pilot mandals • Climate wall writings and capacity building activities • Maps showing potential production zones
2	Socio-economic and agricultural characterization	• Baseline report • Household survey
3	Wastewater reuse system establishment in pilot area	• Quantity of wastewater treated and reuse • Area irrigated using treated wastewater • Production from wastewater irrigated field
4	Soil health cards	• Soil sample collected and analysed • Soil health card distributed
5	Enhancing Soil Fertility	• No. farmers, area, and quantity of input application • Number of composting units and production • Yield data
6	Enhancing crop Production: Introduction of new productive crops cultivars	• Area coverage (crop-cultivar wise for agri and hort) • Increase in productivity
7	Sustainable crop intensification through cultivating post-rainy fallow areas	• Increase in Production • Percentage of seed replacement • Commodity based FPOs
8	Livestock and feed/fodder production enhancement	• Increased production in fodder • Fortification of fodder • Fodder banks • Improvement in indigenous cattle • Enhanced milk, meat, and eggs production • Milk and fodder based FPOs

Key Interventions at Pilot Sites *(Contd..)*

Sr No	Activity	Output Indicators
9	Improved production of inland fish	• Increased production of inland fish • Fisheries FPOs
10	Enhanced Rainwater harvesting	• Number of rainwater harvesting structure • Water storage capacity developed
11	Enhancing water use efficiency	• Area coverage • Increase in productivity • Quantity of water saved
12	Integrated pest management	• Area coverage • Reduction in cost on pesticide use • Increase in productivity
13	ICT for Effective Delivery System	• Farmer to farmer videos • Number of Green SIM cards (Krishi Vani) • Use of Green Phablets (Krishi Gyan Sagar)

14	Capacity building of stakeholders	• Number of training/workshop organized
		  ◦ State level
		  ◦ Sectorial level
		  ◦ Pilot site level
		• Communication materials produced
		• Awareness campaigns

Public Private Partnerships

- Mechanization
  - Sumitomo & Kubota
  - Mahindra & Mahindra
- Seeds
  - Nuziveedu Seeds
  - Hi-tech Seeds
- Irrigation
  - Jain Irrigation
- FPOs
  - NABARD
  - BASIX
  - Vruti
- Fodder Production
  - Healthy Farms
  - NDDB
  - BAIF

Way Forward

Naming and Branding the APPSM

Bhoo	Raithu	Krishi	Other
Bhoo Sampada Bhoo Sampanna	Raitu Samrudhi Raitu Kosam	Krishi Chaitanya Krishi Kamdhenu Krishi Sampada Krushi Samrudhhi	Grama Chandrodaya Padhakam Grama Syamal Yojana Gramabhivrudhi Yojana

Awareness Campaigns

- At State level
- At district level
- Mandal
- Short films
- Literature
- Print media
- Audio visual media

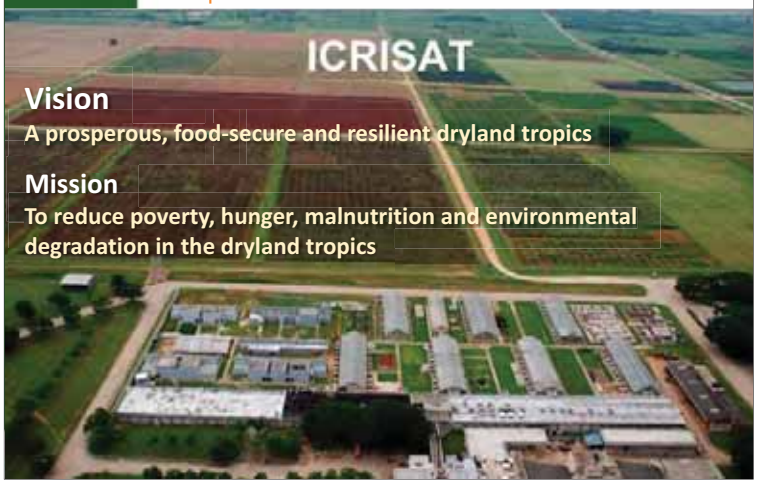
Thank you

CGIAR

ICRISAT is a member of the CGIAR Consortium

International Crops Research Institute for the Semi-Arid Tropics

A Global R&D Organization for Semi-Arid Agriculture



Vision

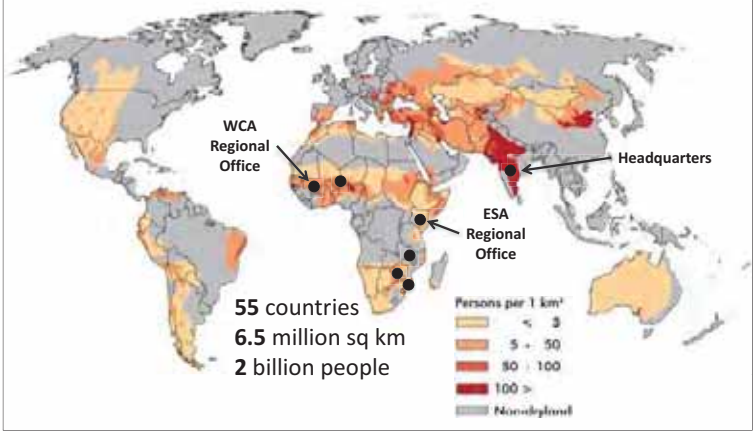
A prosperous, food-secure and resilient dryland tropics

Mission

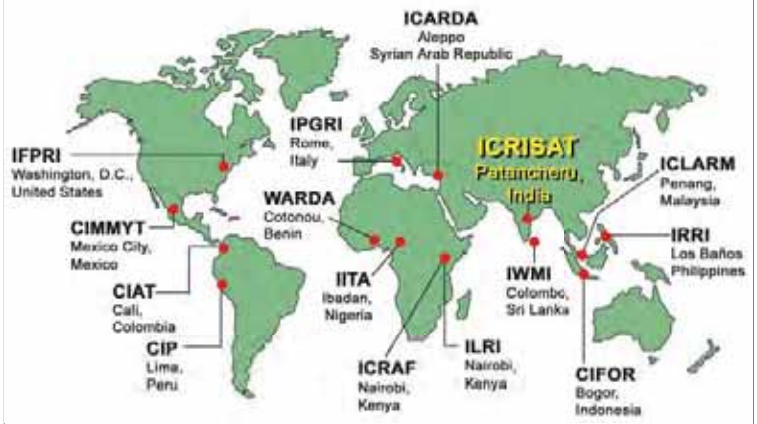
To reduce poverty, hunger, malnutrition and environmental degradation in the dryland tropics

ICRISAT Locations

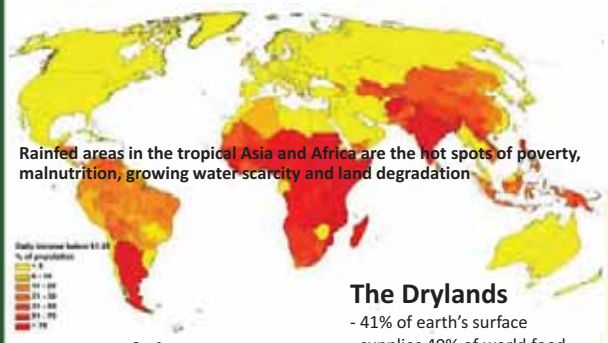
in the semi-arid tropics



The CGIAR



Dryland Tropics



Rainfed areas in the tropical Asia and Africa are the hot spots of poverty, malnutrition, growing water scarcity and land degradation

Home of the poor

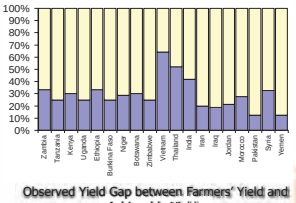
- 644 M people poorest of the poor
- 42% malnourished children in Asia
- 27% malnourished children in Sub-Saharan Africa
- 2/3 of the people depend on agriculture

The Drylands

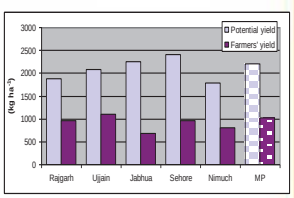
- 41% of earth's surface
- supplies 40% of world food
- 2 billion inhabitants
- ICRISAT works in 55 countries

Rain-fed Agriculture has the Potential

Continent Regions	Total arable land (million ha)	Rainfed area (million ha)	% of Rainfed area
World	1551.0	1250.0	80.6
Africa	247.0	234.0	94.5
Northern Africa	28.0	21.5	77.1
Sub-Saharan Africa	218.0	211.0	96.7
Americas	391.0	342.0	87.5
Northern America	253.5	218.0	86
Central America and Caribbean	15.0	13.5	87.7
Southern America	126.0	114.0	90.8
Asia	574.0	362.0	63.1
Middle East	64.0	41.0	63.4
Central Asia	40.0	25.5	63.5
Southern and Eastern Asia	502.0	328.0	65.4
Europe	295.0	272.0	92.3
Western and Central Europe	125.0	107.5	85.8
Eastern Europe	169.0	164.0	97.1
Oceania	46.5	42.5	91.4
Australia and New Zealand	46.0	42.0	91.3
Other Pacific Islands	0.57	0.56	99.3



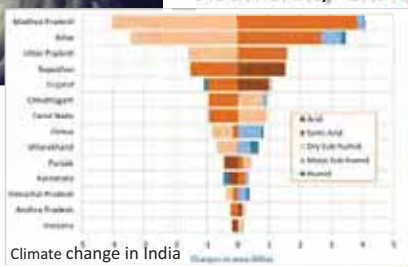
Observed Yield Gap between Farmers' Yield and Achievable Yields



Yield Gap of Soybean in MP, India

The Big Threat

- Climate crisis
- Water crisis
- Desertification
- Food crisis
- Energy crisis
- Population crisis
- Biodiversity crisis



Climate change in India

Swarnandhra Vision
A Mission on Primary Sector

Transforming Agriculture in Andhra Pradesh:
Equitable, Scientific, Prosperous and Climate Smart


ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Why – How – What

Why	To transform lives of 62% of people thru agricultural growth engine
How	Science-led, equitable, inclusive and prosperous agriculture thru convergence
What	A primary Sector Mission to achieve double digit growth


Aspirational Goal

To make Andhra Pradesh as one of the top three states in agriculture development by 2022 to make farmers prosperous happy thru inclusive and sustainable development

Agriculture Transformation

Sectoral	→	**Holistic**
Subsistence	→	**Marketable Surplus**
Productivity	→	**Profitability**
Vulnerability	→	**Sustainability**

Mission Strategy

I	C	Es
Innovate	Convergence	Efficiency
Inclusive	Collective	Equity
Intensive	Consortium	Environment Protection
Integrated	Capacity building	Economic gain

Strategy: Mission Mode ARTs

A	R	Ts
Assertion	Respect	Triumph
Accountability	Responsibility	Trust
Action	Resource	Timely
Achievement	Recognition	Tangible

Consortium Approach

Critical Areas

- Planning
- Execution
- Monitoring
- Refinement
- Scaling-up

Growth Engines

- Paddy
- Pulses
- Maize
- Groundnut
- Vegetables
- Fruits
- Fish
- Dairy
- Poultry

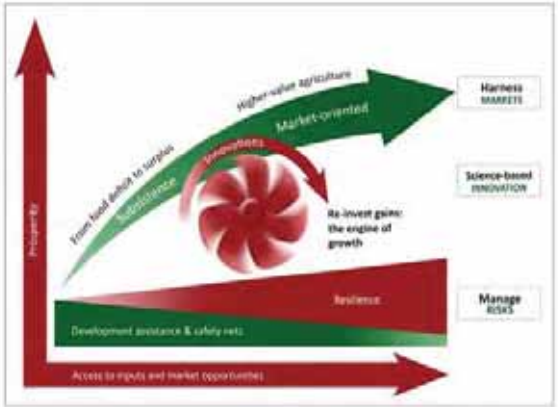


How

- to enhance productivity
- to minimize post-harvest
- to enhance quality
- to add value
- to generate more income for the farmers


Strengthening Market Linkages:

Inclusive Market-Oriented Development (IMOD)



Multi-prong Market and Value Chain

- ❖ SHGs – Producers companies
- ❖ Strengthening Rayathu Bazars
- ❖ National Commodity and derivative exchange (NCDEX)
- ❖ Public private partnerships
- ❖ Drought proofing

Digital Agriculture: Upgrade Delivery Systems

- For effective delivery, monitoring and information dissemination for achieving the impact
  - ICT for innovative extension systems
  - Agromet Advisory Services
  - GIS-based certified land titles
  - Use of Satellite imageries

Generate One Million Jobs in Primary Sector

Certified human resource development in

- Agroprocessing
- Polyhouses
- Breeding farms
- Dairy industry
- Fisheries
- Value-addition

Monitoring and Evaluation:

What is measured gets delivered

- Monitoring at all levels – Mandal to State Mission
- Use of ICT for on-line M&E
- Coordination at district level
- Value-chain/product wise monitoring

Thank you

Agriculture

Agriculture- Growth Engines

Sl. No.	Growth Engine	Area (lakh ha)		Yield (kg/ha)		Production ('000 MT)			GVA value (Rs in Cr.)	
		2014-15	2015-16	2014-15	2015-16	2014-15	2015-16	% increase	2014-15	2015-16
1	2	4	5	6	7	8	9	10	11	12
1	Paddy	23.88	24.73	3402	3712	12315	13770	12	18514	20701
2	Cotton	8.21	8.28	529	600	1449	1490	3	5604	5763
3	Maize	3.00	4.00	6260	6618	1883	2647	41	2168	3048
4	Sugarcane	1.39	1.50	70192	77628	10787	11644	8	1723	1859
5	Tobacco	1.35	1.33	1918	2111	259	283	9	2973	3248
6	Groundnut	8.72	9.00	585	677	498	610	22	1573	1927
7	Blackgram	3.17	3.75	681	800	267	300	12	1560	1753
8	Bengalgram	3.17	4.75	1114	1250	419	593	41	1031	1460
9	Redgram	1.51	2.00	481	550	85	110	29	337	437
	Others								9082	10294
	Total								44565	50490
9	Micro nutrient		17.00	The impact is accounted for in crops of paddy,maize,cotton,groundnut						
10	Addl area to be brought under irrigation		2.00	The area is likely brought under irrigation during Rabi 2015-16 and cropping pattern will be decided as per water avaialbility						

Growth Engine- Paddy

Existing yield gap of 890 kg/ha in rice over best performing state of Punjab(3989 kg/ha)

- Submergence tolerant cultivars (Sambha masuri sub1, Swarna sub1,CR 1009 Sub 1)
- Salinity tolerant cultivars (DRR dhan 39)
- Drought tolerant cultivars (Sahbhagi dhan, IR64 drt 1)
- Mechanisation for transplanting
- Direct seeded rice in upland as well as tail end areas using seed drills , drum seeders
- Balanced nutrient application
- Efficient water management

Action Plan for addressing the yield gap

Sl.No.	Technological interventions	Area proposed
1	Varietal replacement	2.50
2	Quality seed replacement	
3	Direct seeding MSRI (Drum Seeding & Mechanical Transplanting)	5.00
4	Micronutrient application	8.00
5	Green manuring	2.50
6	Increasing the area under pulses in Rice fallows	4.00
7	Raising Red gram on Rice bunds	0.40

Growth Engine- Maize

Rainy Season Maize

- 45% of maize area (1.0 lakh ha) is cultivated during rainy season with 3.7 t ha^{-1} productivity which is half of *rabi* season maize productivity
- Using drought tolerant maize in upland areas productivity can be enhanced
- Balanced nutrient application would increase productivity

Rice Fallow Areas

- Rabi maize will be popularised in 3 lakh ha in rabi rice area for effective water use
- Zero tillage after direct seeded or early maturing paddy would enable maize cultivation and save water also.
- Balanced nutrient application with drought tolerant cultivars would increase productivity and area expansion under maize
- Mechanization would bring in efficiency and profitability for the farmers

Action Plan for addressing the yield gap

Sl.No.	Technological interventions	Area proposed
1	Additional area under Maize	1.00
2	Zero tillage	1.00
3	Micronutrient supply	2.00

Growth Engine- Groundnut

Action Plan for addressing the yield gap

Sl.No.	Technological interventions	Area proposed
	GROUNDNUT	
1	Application of gypsum and micronutrients	5.00
2	Varietal replacement	4.00
3	Popularization intercropping of Red gram with other pulses and oilseed crops like ground nut in Ananthapuramu and other districts.	4.00

Growth Engine- Cotton

Action Plan for addressing the yield gap

Sl.No.	Technological interventions	Area proposed
	COTTON	
1	High density planting	0.03
2	Micronutrient supply	2.00

Micronutrients to Boost Agricultural Production and Productivity

- Widespread deficiencies of multiple nutrients in soils of A.P are observed
- Soil sample collection and analyses by DoA is in progress
- Incentivised micronutrient supply based on soil mapping along with targeted awareness building will increase crop productivity by 10 per cent on 26.6 lakh ha (20.5 lakh ha with direct application of nutrients and 6.1 lakh ha with residual benefits)

Micro-nutrients Soil analysis data for 2014-15

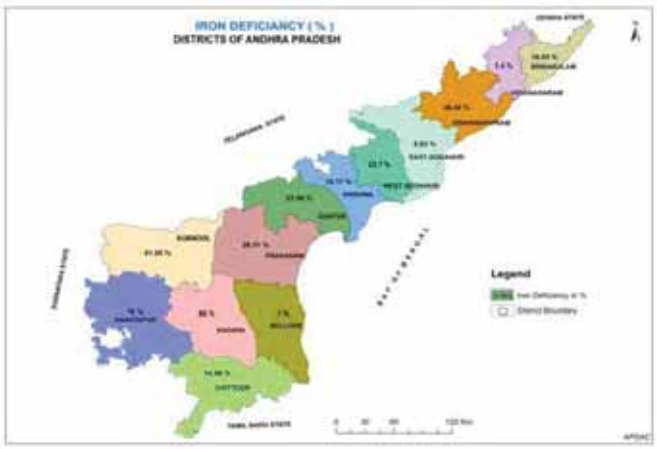
S o	istri t	otal o of samples analysed	in		opper		Iron		Manganese		S lph r		
			elo riti al e el		elo riti al e el		elo riti al e el		elo riti al e el		otal samples analysed	elo riti al e el	
1	Srikakulam	6724	2712		310	1	1078	1	256	1	8764	493	
2	Vijayanagaram	12079	5390		166	1	169	1	205	1	15479	800	1
3	Visakapatnam	3745	1732		240	1	1364		892		3789	100	
4	East oda ari	6878	3046		30		346		144		7826	160	
5	est oda ari	5299	2827		596	11	1256		388		6853	602	
6	Krishna	3365	2203		40	1 1	544	1 1	129		7905	202	
7	untur	6191	2643		98	1	1460		121	1	7650	504	
8	Prakasam	6565	2008		87	1	1727	1	247		3685	725	1
9	Nellore	9020	5683		271		631		180		12852	126	
10	nanthapur	5000	1200		50	1	800	1	100		3900	663	1
11	Thirupathi	8949	2052		35		1332	1	638	1	16311	1551	1
12	Kadapa	4600	3450		0		2990		0		4577	1739	
13	Kurnool	8806	5725	1	1441	1	7181	1	1896	1	5834	3029	1
	Total	87221	1						5196		101525	10031	

Soil Fertility Management: Trade-offs

- Full costing of micro- & secondary- nutrients = Rs. 250 crores
- Value addition= Rs.2275 crores (with 10% increase in productivity)
- Enhanced resource use efficiency
- Improvement in soil health & ecosystem services

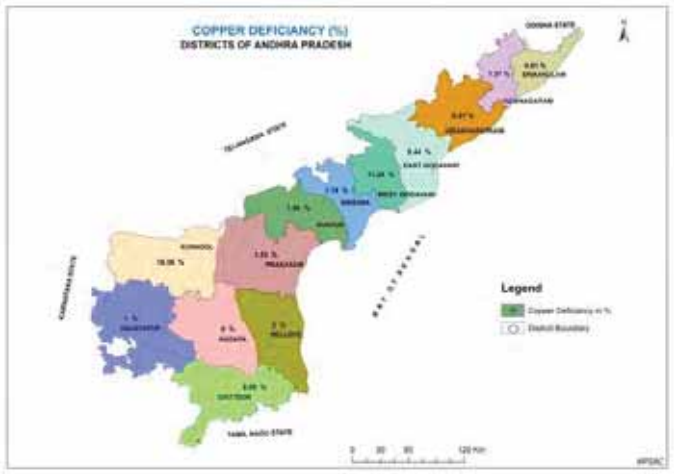
Crops	Area for micro & sec- nutrients (Lakh ha)	Cost (crore)	Addition in value (crore)	Benefit to cost ratio
Benefits with direct application of nutrients				
Agricultural crops (paddy, maize, groundnut, cotton, other)	17.0	210	832	
Horticultural crops (Chillies, tomato, onion, banana, papaya, cashewnut, oilpalm, mango, sweet orange)	3.5	40	917	
Residual benefits in rabi season				
Agricultural crops (paddy, maize, groundnut)	5.0	0	214	
Horticultural crops (Chillies, tomato)	1.1	0	116	
Total	**26.60**	**250**	**2079**	**7.58**

Iron status in Andhra Pradesh (2014-15)



Zinc status in Andhra Pradesh (2014-15)

Copper status in Andhra Pradesh (2014-15)



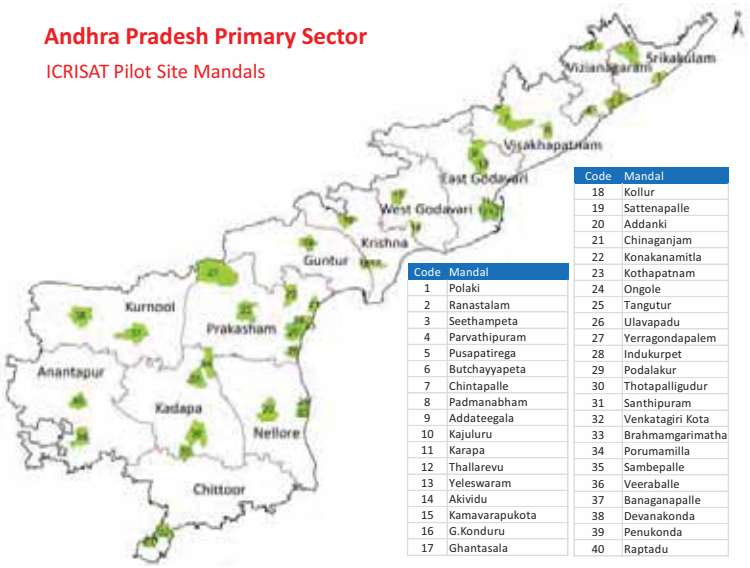
ICRISAT

Primary Sector Development

Pilot Sites and Action Plans

Andhra Pradesh Primary Sector

ICRISAT Pilot Site Mandals



Code	Mandal
1	Polaki
2	Ranastalam
3	Seethampeta
4	Parvathipuram
5	Pusapatirega
6	Butchayyapeta
7	Chintapalle
8	Padmanabham
9	Addateegala
10	Kajuluru
11	Karapa
12	Thallarevu
13	Yeleswaram
14	Akividu
15	Kamavarapukota
16	G.Konduru
17	Ghantasala

Code	Mandal
18	Kollur
19	Sattenapalle
20	Addanki
21	Chinaganjam
22	Konakanamitla
23	Kothapatnam
24	Ongole
25	Tangutur
26	Ulavapadu
27	Yerragondapalem
28	Indukurpet
29	Podalakur
30	Thotapalligudur
31	Santhipuram
32	Venkatagiri Kota
33	Brahmamgarimatha
34	Porumamilla
35	Sambepalle
36	Veeraballe
37	Banaganapalle
38	Devanakonda
39	Penukonda
40	Raptadu

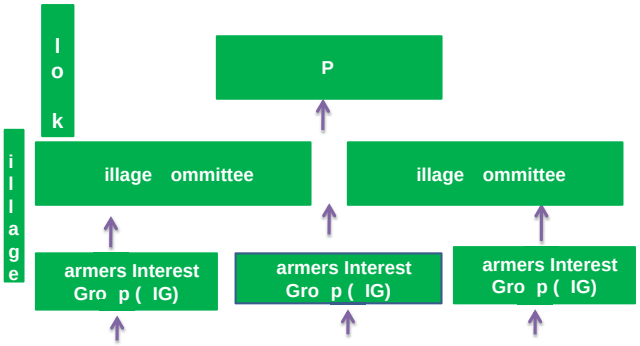
Pilot Sites

S.NO	District	Pilot Site Area (ha)	No. of Mandals	No. of Villages	Crop Area		Livestock (No.)	Fisheries (ha)
					Agriculture	Horticulture		
	1	2	3	4	5	6	7	8
1	Ananthapur	10000	3	12				
2	Chittoor	10879	2	19	7941	1860	524396	-
3	East Godavari	10162	5	77	-	-	-	2162
4	Guntur	10000	4	20	-	-	19980	-
5	Kadapa	10000	4	13	-	-	-	-
6	Krishna	10000	7	43	14378	1200		2000
7	Kurnool	10000	2	10	-	-	-	-
8	Nellore	12147	3	10	7854	1574	-	367
9	Prakasam	10900	8	-	5000	2000	-	3898
10	Srikakulam	10500	3	57	4721	3392	-	-
11	Visakhapatnam	10500	3	23	-	-	-	-
12	Vizianagaram	10273	2	23	-	7030	-	-
13	West Godavari	10546	1	8	18558	4245	-	1022

Farmer Producer Organizations

Structure of Farmers' Producers' organization

- ne IG 1 - armers
- ne illage 1- IG (1 to armers)
- ne P 1 - illages (- IG ith 1, farmers)



Producers: E.g., Vegetable Growers/pulse growers

Farmers' Producers Organizations

Districts

District	FPOs	Farmers
East Godavari	6	18000
West Godavari	3	3000
Krishna	3	12000
Nellore	3	3000
Guntur	10	34000
Prakasham	9	30000
Vijayanagaram	3	12000
Srikakulam	6	18000
Vishakapatnam	3	3000
Kadapa	3	6000
Kurnool	15	42000
Chittor	3	6000
Ananthapur	9	33000
Total	**76**	**220000**

Commodities

Commodity	FPOs	Farmers
Dairy	12	60000
Tomato	6	12000
Onion	3	6000
Chilly	6	12000
Banana	6	12000
inland Fisheries	9	9000
Marine Fish	9	9000
Paddy	12	48000
Maize	6	24000
Cotton	4	16000
Ground Nut	3	12000
Total	**76**	**220000**

Expected output and Impact of FPOs

onomi Impa t (ompared to the baseline)

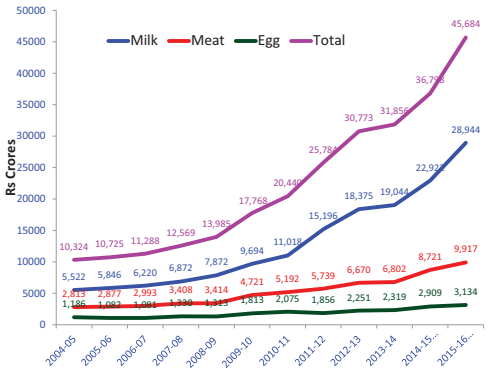
- Per hectare production impro ed by 10% by end o project period
- Increase in net return to armer In lation 10%
- Reduce gap in a ailability o inputs by 20 25%
- Institutional iability
- Increase in sub sector de elopment or agriculture
- Increased ood nutritional security
- Market linkage or backward and orward integration will be ensured
- dditional employment generated due to increased intensity o arming
- Benchmark minimum wage rate or labor or men and women separately

So ial Impa t

- Social capital built in the orm o FP s
- Impro ed gender relation decision making o women armers in F FP s – No o women in key board member positions
- Increased bargaining power or input purchase and output marketing
- Reduce social con licts and risks and enhance wel are at household le el
- Impro ed ood and nutritional alue
- eadership role o producers in technology absorption
- En ironment carbon credit
- Reduction in Migration
- Positi e health and nutrition e ects or users

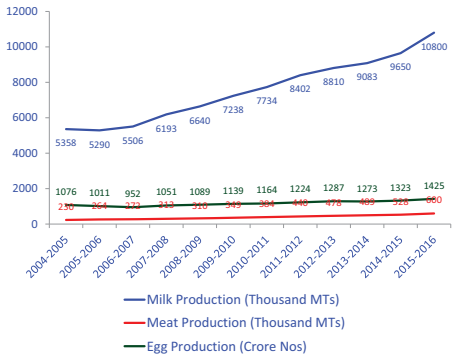
Livestock

GVA – Livestock Sector
Commodity wise growth for last 10 years (Rs Cr)



Year	Growth Rate % in GSDP
2004-05	
2005-06	3.88
2006-07	5.25
2007-08	11.35
2008-09	11.27
2009-10	27.05
2010-11	15.04
2011-12	26.15
2012-13	19.35
2013-14	3.52
2014-15 (Anticipated)	15.51
2015-16 (Projected)	24.15

Quantity Produced during last 10 years



Year	GR%
2004-05	
2005-06	-1.13
2006-07	3.14
2007-08	12.42
2008-09	6.57
2009-10	8.80
2010-11	6.63
2011-12	8.65
2012-13	5.05
2013-14	2.76
2014-15 (Anticipated)	6.17
2015-16 (Projected)	11.72

Strategies and activities to achieve Double Digit Growth

- Livestock Health Care – Health Calendar
- Fodder Policy – Post Harvesting/ Conservation/ Marketing
- Breeding Policy – Sexed Semen/ ET Lab/ Indegenous breeds/ NGOs
- Animal Hostels – Integrated Model
- Milk Policy – Procurement/ Processing / Value Addition / Market Intelligence
- Credit Support – Dairy / Poultry / Sheep farmers
- Meat and Egg Policy – Meat and Egg Processing and Marketing/ Value Addition / Market Intelligence
- Convergence – Fodder Development
- Awareness and Capacity Building - Dairy farmers / Shepherds / Deptl Staff
- IT tools - MIS/GIS

Activities & Timelines – Fodder Development

Activity	Time Line
Fodder Policy	May 2015
Fodder Seed Distribution (3500 MTs)	May 2015
EOI for Fodder Production / Conservation / Marketing	June 2015
Tie up with approved Entrepreneurs	July 2015
Azolla (3000 Units)	July 2015
Perennial Fodder Development (13000 Acres)	July 2015
Hydroponics (200 units)	Aug 2015
Fodder Banks (3 locations)	Sept 2015
Promotion of Dual purpose crops (ILRI-2500 Acres in Rice fallows)	Oct 2015
Silage (2000 Units)	Oct 2015
Commercial Silage Bales (15000 MTs)	Nov 2015
Fortification and Baling of Khariff Maize stover (7 Lakh MTs) and Crop Residues	Dec 2015
Fortification of Rabi Maize stover (addl production from 4 Lakh Ha)	Mar 2016

- **Outcome**
  - Reduce the fodder shortage
  - Supports medium / big dairy farmers' fodder requirements
  - fodder becomes an economic activity

Activities & Timelines – Other activities

Activity	Time Line
Medium / Big Dairy Farmers (2500)	Identified
Regional Conference with Medium / Big Dairy farmers (3 locations)	May 2015
Survey for identification of 7 Lakh farmers (10 lakh animals producing more than 6 Lit of Milk per day); 3 Lakh Heifers and 5 Lakh high pedigree female calves; 21000 SHGs; 50 FPOs for Milk	June 2015
Credit support through Banks	June 2015
Capacity Building of Dairy Farmers	July 2015
Sexed Semen (10000 doses)	July 2015
Creating Marketing avenues for additional Milk Production (32 Lakh Litres per day) – Mega Dairy/Milk Powder Plant / Marketing Intelligence	Aug 2015
Training of 7 lakh dairy farmers and 2 lakh shepherds	Aug 2015
ET and Sexed Semen Lab (PPP- 1 Location)	Aug 2015
Additional Breeding stock through NGOs (50000)	Aug 2015
Cold storage facilities/egg powder/ Chicken breast processing plant/ Modern slaughter house/Export facilities	Oct 2015
Govt Grazing (waste) lands to Shepherds (10000 Acres)	
MEGA PASU MELA with Dairy / Sheep / Poultry farmers by Hon'ble Chief Minister (Awards / Incentives to Livestock farmers)	Jan 2016 (Pongal)

ILRI Suggestions_24.04.2015

- 5% improvement in the digestibility of stover / straw from 1 Ha land produces 800 Kg more milk and 40 kg less methane
- Reducing the ICP from 16 – 18 months to 13 – 14 months
- For every 3 calvings – one lactation benefit
- Results in 23 Lakh Litres per Day (67.10 LLPD @ 3 years interval)
- Targeting body weight (400 to 250 kg) and Milk Production (7 to 10 Litres per day)
- 10 kg roughage will be saved
- Existing fodder shortage (30%) can be avoided
- Green House Gas emission reduced by 50%

Low Hanging Fruits identified in Livestock Sector

Short Term Strategy:

- 10 Lakh High Yielding cattle with 6 Ltrs Milk Yield per day – Awareness on better feeding aspects to increase milk yield to 8 ltrs per day (Additional Milk Production – 20 LLPD)
- 2468 progressive dairy farmers producing more than 50 ltrs per day – additional credit support to these farmers to enhance milk production – 1.5 LLPD
- 21000 SHGs to be engaged to Dairying activity through NGO's to produce 10 LLPD.
- Total Expected Additional Output – 11.65 Lakh MTs

Medium Term Strategy:

- Better care & Management of (3 lakh) Heifers of high genetic merit between 18-20 months for early conception.

Long Term Strategy:

- Better care & management of (5Lakh) improved heifer calves for early maturity.

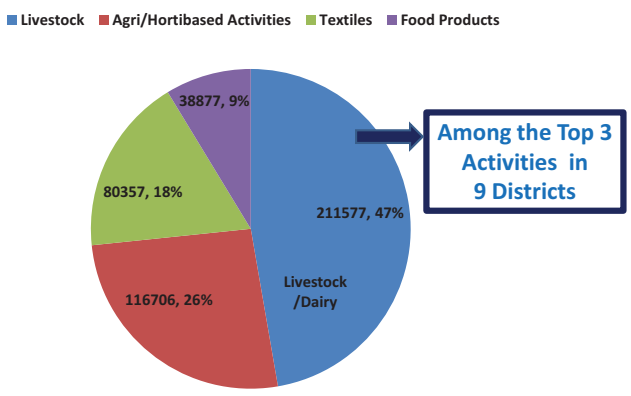
Growth Engine- Milk

Sector	Productive Animals in Lakh Numbers			Productivity Per Animal In Kgs per day			Production per Year Lakh Metric Tons			Production Value (Rs in Crores)		Projected Growth for 2015-16	
	2014-15	2015-16	% of Increase	2014-15	2015-16	% of Increase	2014-15	2015-16	% of Increase	2014-15	2015-16	Inc in Value (Rs in Crores)	% of increase
a) Milk from Crossbred Cows	8.289	9.035	9.00	7.697	8.24	7.05	23.29	27.17	16.69	5528	7283	1755	31.75
b) Milk from Non Descriptive Cows	7.989	7.590	-5.00	2.477	2.58	4.16	7.22	7.15	-1.05	1715	1916	201	11.72
c) Milk from Graded Murrah Buffaloes	15.997	17.437	9.00	7.612	8.14	6.94	44.45	51.81	16.56	10551	13886	3335	31.61
d) Milk from Non Descriptive Buffaloes	14.998	14.248	-5.00	3.946	4.21	6.56	21.60	21.87	1.24	5128	5861	733	14.30
Sub- Total	*47.273*	*48.309*	*2.19*	*5.43*	*5.79*	*6.59*	*96.56*	*108.00*	*11.85*	*22922*	*28944*	*6024*	*26.28*

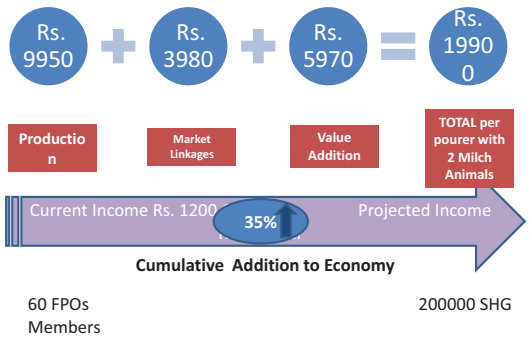
Action Plan for Additional Milk Production

Strategies	Activities	Estimated Additional increase in production in lakh liters per day	Estimated additional annual milk production in Lakh Metric Tons	Budgeted or Not	
Increasing the average milk yield of 20 lakh Improved Animals by 1 litre per day(including those with SHG)	Capacity building, Fodder Development &Mineral supplementation	20	7.519	Partially Budgeted	
Increasing the average milk yield of 10 lakh Non descript Animals by 1/2 litre per day	Capacity building, Fodder Development & Mineral supplementation	5	1.88	Partially Budgeted	
Milk production from additional breeding stock(1.04 lakh) added from A.I activity (@ 5 lit per animal per day)	Artificial Inseminations, Calves born, Preventive and Curative Health Care	5	1.95	Budgeted	
Additional milk production through 2500 Big & Medium Dairy Farms each producing 50 litres per day to create facilities for additional 100 lts per farm	Capacity building and credit facilities	1	0.38	NA	
	Total	**31**	**11.73**		

Role of Dairy in SHG Livelihoods



Dairy FPOs by SERP
Return on Intervention



60 FPOs Members

200000 SHG

Note:

SERP Internal Survey showed a value addition of a total of Rs. 19900 per dairy farmer assuming that they had 2 milch animals. Of this, 50% is expected to come from Production related interventions, 20% from Market Linkages and 30% from Value Addition

Cumulative Figures are calculated using currently available data of2,11,000 SHG members engaged in Dairy from the SERP Micro Enterprise Survey

Fodder Policy (2015-16)

Sl. No.	Name of the Activity	Physical	Funding plan for 2015-16 (Rs. in Crores)				
			Financial	Budgeted	Additional funds required	funds through other sources	Remarks
1	Fodder seed supply for annual fodders (in MT's)	3500	17.5	5.00	12.5	-	
2	Perennial fodder production under assured irrigation sources (in acres)	13000	31.20	-	-	31.20	Funding from MGNREGS
3	Fodder banks &Conservation of crop residues through fodder bales in PPP(in MTs)	10000	8.00	8.00	-	-	for summer management in Chittoor & Ananthapur
4	Fodder block making units	4	4.00	4.00	-	-	For Maize Stover utilization in PPP
5	Silage Making Units for Individual farmers (Rs.18000/- per unit)	2000	3.60	-	-	3.60	Funding from MGNREGS

Fodder Policy (2015-16)

Sl. No.	Name of the Activity	Physical	Funding plan for 2015-16 (Rs. in Crores)				
			Financial	Budgeted	Additional funds required	funds through other sources	Remarks
6	Hydrophonics in PPP(Rs.30000/- per unit)	200	0.60	0.60	-	-	.
7	Azolla units(Rs.5000/per unit)	3000	1.50	1.50	-	-	-
8	Promotion of commercial Silage Bales on PPP(in MTs)	15000	8.00	8.00	-	-	-
9	Capacity Building f to Dairy Farmers with an Incentive of Mineral Mixture (Rs.300 per person, Rs.70 per kg)	700000	91.00	3.00	88.00	-	-
10	Credit facility to Big farmers through Bank linkage	1000	-	-	-	-	Rs.50 Crore institutional credit
	Total		165.40	30.10	100.50	34.80	

Growth Engine- Meat & Egg

Sector	Productive Animals in Lakh Numbers			Productivity Per Animal In Kgs			Production per Year Thousand Metric Tons			Production Value (Rs in Crores)		Projected Growth for 2015-16	
	2014-15	2015-16	% of Increase	2014-15	2015-16	% of Increase	2014-15	2015-16	% of Increase	2014-15	2015-16	Inc in Value (Rs in crores)	% of increase
Meat Production													
a) Buffaloe Meat	5.913	6.386	8.00	106.76	116.37	9.00	63.13	74.32	17.72	1044	1228	184	17.65
b) Sheep Meat	69.075	74.601	8.00	14.30	15.15	6.00	98.75	113.04	100.00	1632	1867	235	14.41
c) Goat Meat	34.212	36.607	7.00	12.66	13.42	6.00	43.33	49.14	13.42	716	812	96	13.35
d) Pig Meat	0.398	0.410	3.00	38.08	39.61	4.00	1.51	1.62		25	27	2	7.06
d) Backyard Poultry Meat	92.322	97.862	6.00	1.21	1.29	6.00	11.21	12.60	100.00	185	208	23	12.29
e) Commercial Poultry Meat	2754.229	2,864.398	4.00	1.12	1.22	8.50	309.82	349.60		5121	5775	654	12.77
Sub- Total	*2956.150*	*3080.264*	*4.20*	*13.27*	*13.88*	*4.62*	*527.751*	*600.330*	*13.75*	*8721*	*9917*	*1196*	*13.71*
Egg Production				Eggs / year			Crore Eggs						
a) Eggs from Backyard Poultry	112.630	118.261	5.00	71.00	75.00	5.63	79.967	88.70	10.92	178	195	18	9.87
b) Eggs from Commercial Poultry	408.582	439.634	7.60	301.00	304.00	1.00	1229.832	1336.49	8.67	2731	2940	209	7.64
Sub- Total	*521.212*	*557.895*	*7.04*	*186.00*	*189.50*	*1.88*	*1309.799*	*1425.18*	*8.81*	*2909*	*3134*	*226*	*7.78*
Others										*2246*	*3689*		
Grand Total			4.48			4.36			11.47	36798	45684	8886	24.15

Action Plan for additional Meat Production

Strategies	Activities	Estimated additional annual meat production in Lakh Metric Tons	Budgeted or Not	
Increasing the average meat yield of each sheep by 2 Kg per annum in 40 lakh sheep	Capacity building of shepherds for exchange of 2 lakh breeding rams	0.08	Budgeted	
Increasing the average meat yield of Ramlambs by 8 Kg per annum in 20 lakh Ramlambs.	Capacity building of shepherds to with hold the lambs up to the marketable age of 12 months	0.16	Budgeted	
Additional Meat Production due to addition of extra 8 lakh sheep & goat (15 kg slaughter weight per animal) 47000 buffalo (116 kg slaughter weight per animal) & 250lakh poultry (1.2 kg slaughter weight per bird) to the culled stock	Preventive and curative health care measures	0.47	Budgeted	
Additional Meat production through supply of 11000 backyard poultry units (each unit 45 birds). Slaughter weight 2kg per bird	Capacity building and supply of units	0.001	Budgeted	
Additional Meat production of 0.2 kg from 80 lakh desi birds	Preventive and curative health care measures	0.016	Budgeted	
	Total	0.727		

Activities for Meat Production

Sl. No.	Name of the Activity	Physical	Funding plan for 2015-16 (Rs. in Crores)				
			Financial	Budgeted	Additional funds required	funds through other sources	Remarks
1	*2*	*3*	*5*	*6*	*7*	*8*	*9*
1	Capacity building to shepherds with incentives for Breeding Ram exchange, (including Insurance)	200000	30.00	-	30.00	-	.
2	Support to the entrepreneurs in the form of bank linkages for retention of ram lambs	2000000	-	-	-	-	Rs.300 Crores institutional credit
	Total		30.00	-	30.00	-	

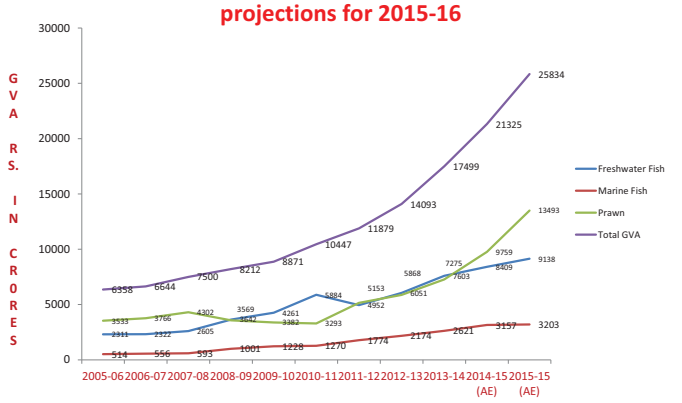
Dairy

Strategies to achieve the Target during 2015-16 Milk Procurement (APDDCF)

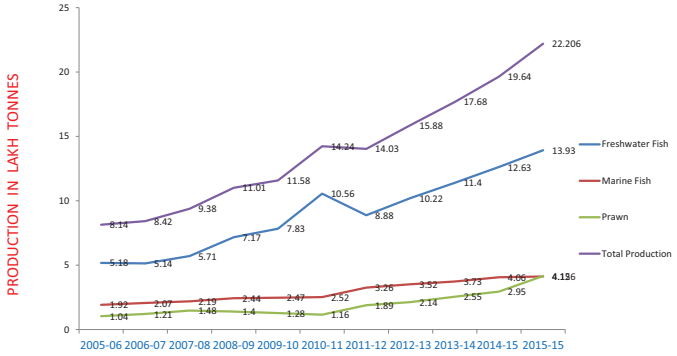
	Milk Procurement during 2014-15 in Lakh Litres (2 LLPD)		730.00
SL	Steps	Technological Interventions	Expected Procurement Lakh Ltrs.
1	Increase Milk Procurement	Expand Milk Routes to vergin areas	73.00
2	Increase Milk Procurement	optimize milk routes	73.00
3	Increase Milk Procurement	Through capacity building/Awareness in existing Milk Collection Centres	73.00
4	Increase Milk Procurement	Promote 10 Dairy Entrepreneurs in each of 6 Districts under APDDCF scope (500 LPD*10 * 6)	109.50
5	Increase Milk Procurement	Revive 58 BMCUs, expand village coverage to 1160, expected Milk Pcoruement /Village 50 LPD	211.70
		Sub Total	**540.20**
	Projected Milk Procurement 2015-16 in Lakh Litres (3.48 LLPD)		**1270.20**
		GR%	**74**

Fisheries

Fisheries Sector- GVA added for the last 10 years with projections for 2015-16



Sector wise Production for the last 10 years with Projections for 2015-16



Fisheries-sector wise production and GVA for the last 10 years with projections during 2015-16

Year/ Sector	Production (Lakh MT)				Growth Rate (%)	GVA (Rs. in Crores)				% Contribution at current price to GSDP	Growth Rate (%)
	Freshwater fish	Marine fish	Prawn	Total		Freshwater fish	Marine fish	Prawn	Total		
2005-06	5.18	1.92	1.04	8.14	5.85	2311	514	3533	6358	4.31	6.23
2006-07	5.14	2.07	1.21	8.42	3.44	2322	556	3766	6644	3.82	4.50
2007-08	5.71	2.19	1.48	9.38	11.40	2605	593	4302	7500	3.53	12.88
2008-09	7.17	2.44	1.4	11.01	17.38	3642	1001	3569	8212	3.46	9.49
2009-10	7.83	2.47	1.28	11.58	5.18	4261	1228	3382	8871	3.25	8.02
2010-11	10.56	2.52	1.16	14.24	22.97	5884	1270	3293	10447	3.27	17.77
2011-12	8.88	3.26	1.89	14.03	-1.47	4952	1774	5153	11879	3.28	13.71
2012-13	10.22	3.52	2.14	15.88	13.19	6051	2174	5868	14093	3.44	18.64
2013-14	11.4	3.73	2.55	17.68	11.34	7603	2621	7275	17499	3.77	24.17
2014-15 (AE)	12.63	4.06	2.95	19.64	11.09	8409	3157	9759	21325	4.1	21.86
2015-16 (AE)	13.93	4.12	4.156	22.206	13.07	9138	3203	13493	25834	To be calculated	21.14

(Prawn: Both cultured & captured shrimp and prawn from Inland and Marine sources)

(Source: Production particulars- Dept. of Fisheries, GVA- Director, Econonomics and Statistics)

Sector-wise projections for the years 2014-15 & 2015-16

Sl. No	Sector	2014-15 (AE)		2015-16 (AE)		% of Growth Rate	
		Production (lakh tonnes)	Value (Rs in Crores)	Production (lakh ton.)	Value (Rs in Crores	Production	Value
I	Prawn production (culture prawn and shrimp from Freshwater, Brackish water and captured shrimp from Marine fisheries sector	2.95	9759	4.156	13493	40.88	38.26
II	Freshwater Fish	12.63	8409	13.93	9138	10.29	8.67
III	Marine Fish	4.06	3157	4.12	3203	1.46	1.46
	TOTAL	**19.64**	**21325**	**22.206**	**25834**	**13.07**	**21.14**

Note: GVA values as per DES for 2014-15 (AE) and approximate estimated GVA values for 2015-16 are projected in the above table

Growth Engine- Brackish Water

Sl. No	Strategies	Actionable Points	Estimated additional increase in Production (in Lakh Tonnes)	Estimated Total Production (L.T)	Budget Allocated (Rs in Crores)	Support from other institutions
	A) Revival of defunct culture area and Optimum utilisation of existing area	Promotion through incentives for revival of defunct area for 1000 ha and inputs subsidy , Cluster approach for shrimp farming with the assistance of NaCSA	0.05	1.1	20.00	Expedite the process of registration of new farms, hatcheries through CAA
	B) Promotion of diversified species	Promotion of Sea bass culture in 100 ha and Mud Crab in 100 ha by providing subsidy for revival of defunct area & for inputs , Assistance for establishment of Sea bass & Mud Crab hatcheries	0.006	0.006	5.10	Technical support from CIBA, CAA, RGCA, MPEDA, SVVU for promtion of alternate species
	C) Mechanisation in Aquaculture	Incentive for farm mechanisation for aerators, solar pump and solar lights for 1000 farmers and promotion of sustainable shrimp production	0.28	0.28	20.11	NEDCAP financial & technical Support
	D) Disease surveillance and Lab services	Disease diagnostic services at labs and at farm site to reduce the crop losses due to disease out break for 15000 farmers	0.36	0.36	2.00	MPEDA, NaCSA technical support through lab services
	E) Capacity Building and Extennsion activitie	Awareness on Best Management Practices and Technical services at farm site for production of quality shrimp crop for 3000 farmers	0.16	0.16	4.46	CIFE, CIBA, MPEDA, SIFT technical support
	TOTAL		0.856	1.906	51.67	

Growth Engine- Fresh Water

Sl. No	Strategies	Actionable Points	Estimated additional increase in Production (in Lakh Tonnes)	Estimated Total Production (L.T)	Budget Allocated (Rs in Crores)	Non financial requirement
	A) Promotion of L.vannamei culture in Freshwater ponds in 5000 ha in addition to optimum utilisation of existing resources of 25000 ha	Promotion of farm mechanisation in L. vannamei farms in 400 ha and cluster approach in aquaculture	0.2	1.301	13.00	Expedite the process of registration of farms through DLCs and Department
	B) Cage culture in reservoirs	Intensive culture in reservoirs/ perennial tanks through cage culture in 144 cages for diversified species Like Tilapia for getting optimum potential yields in 1000 ha.	0.06	0.06	10.02	Technical support from CIFRI and MPEDA
	C) Revival of Scampi culture and promotion of scampi culture in tanks and reservoirs	Revival of scampi culture in 500 ha through input subsidy, stocking of all reservoirs and tanks with advance size of scampi seed	0.01	0.2	2.75	Technical support from , MPEDA, RGCA, SVVU
	D) Stocking of tanks & reservoirs and Promtion of BMPs in existing aquaculture ponds	Stocking of advanced fingerlings of fish seed in all tanks, reservoir, promotion of captive nurseries, desilting and deepening of tanks under RKVY, NFDB & MGRNEGS in about 3 lakh ha,	0.51	13.06	0.50	Funds of Rs. 10 crores from RKVY, Rs. 2 crores from NFDB, Rs. 120 crores from MGNREGS will be tapped
	E) Promotion of alternate species Red Tilapia and GIFT	Introduction of Red Tilapia and GIFT in 1000 ha with MPEDA, RGCA Support	0.3	0.3	10.00	Technical & marketing support from MPEDA
	F)Establsihment of Fish Brood Stock Centres and Hactheries and strengthening of Fish seed Farms	Establishment of4 Brood stock centres to develop genetically improved brood stock, Establishment of 7 hatcheries for scampi, tilapia, carps for supply of quality seed to cater the seed requirement of aqua farmers	0.3	0.3	21.50	Technical support from CIFA, CIFRI, NFDB, NBFGR
	G) Empowerment of SC/ ST socieites through Integrated development	Supply of fishing inputs, mobile fish vending units, social infrastructure development under SCP/ TSP for 32 societies and 800 farmers	0.05	0.05	11.15	Support from District Revenue Authorities and PR Dept
	H) Human Resources Development and Strengthening of existing Training Institutes	Conducting of awareness programmes, trainings and skill upgradation activities to generate more skilled man power in Aquacultrure sector for about 3000 farmers	0.16	0.16	0.40	Technical support from SIFT, MPEDA, CIFA and SVVU
	TOTAL		1.59	15.43	69.32	

Growth Engine-Marine Fish

Sl. No	Strategies	Actionable Points	Estimated additional increase in Production (in Lakh Tonnes)	Estimated Total Production (LT)	Budget Allocated (Rs in Crores)	Non financial requirement
	A) Promotion of Deep Sea fishing	Promotion of tuna long lining for deep sea fishing through subsidy for motorised and mechanised boats about 1500 boats to tap under exploited resources from deep sea water resources	0.06	0.20	12.00	Technical support from CIFNET, CIFT, FSI, SIFT
	B) Establishment of Fish landing Centres	Hygienic handling of harvested fish and shrimp and reduction of post harvest losses through establishing fish landing centres	--	0.27	14.00	Technical support from CICEF, EPTRI, EFST, APPCB
	C) Conservation of Marine resources	Implementation of Ban period on marine fishing for 61 days for conservation of ban period from April 15 to June 14th 2015, Relief assistance to crew members through cash benefitting 90,000 crew members	--	2.00	13.00	Support from Coastal Security Police (CSP), Coast Guard for implementation of conservation period
	D) Promotion of marine fishing through motorised and mechanised fishing vessels	Sales Tax exemption on HSD oil for Mechanised boats (3000 lts/ month) and Motorised Boats (300 lts/ month) @ Rs. 6.03 per LTS. For supporting the marine fishing activities for about 1400 craft	0.04	2.40	14.00	CIFNET, FSI and CIFT technical support
	F) Disaster Preparedness	Maintenance of shore stations, relief boats , GPS tracking for vessel monitoring for taking up cyclone rescue operations, Exgratia to family members of deceased fishers	--		2.60	Support from Disaster Management, Coastal Security Police, Coast Guard, District Revenue Authorities
	TOTAL		0.10	4.87	55.60	

Action Plan for Marketing in Fisheries Sector

Sl. No	Strategies	Actionable Points	Budget Allocated (Rs in Crores)	Non financial requirement
	A) Establishment of Fibre fish marts	Promotion of domestic fish markets by establishing fish vending fibre marts (10 areas) in urban muncipality areas	1.06	Model survey of MATSYA FED. KERALA and MPEDA Support
	B) Value addition	Promotion of post harvest technolgies for value addition through establishing units of de sacler, deboner, packing and marketing (6units)	0.90	Technical support from CIFT, SIFT
	C) Fish vending through Matsya Mithra Groups	Promotion of domestic fish marketing through retail outlet by providing revolving fund to Matsya Mithra Groups (750 women)	0.50	Support from Local Muncipal Authorities
	D) Promotion of AP Fish products in national and international market	Promotion of "**Brand Andhra**" for AP Fish and shrimp produced through print and electronic, expos, exhibitions etc and technical service for establishing infrastructure facilities	7.00	Support from Sea food Exporters Association, EIC, MPEDA
	E) Promotion of Ornamental fish Trade through fisherwomen	Establishment of back yard hatcheries for production of ornamental fish and promotion of marketing, as an alternative livelihood for fisherwomen (120 units covering 1800 fisherwomen)	1.13	Technical support from SIFT, CIFA, MPEDA
		TOTAL	10.59	

Horticulture

Targeted GVA and Production for 2015-16 at Current Prices

Horticulture	2014-15		2015-16	
	GVA (in Crores)	Prod. (in '000 MTs)	GVA (in Crores)	Prod. (in '000 MTs)
Growth Engines				
1.Chillies	3767	524	8174	1220
2.Banana	6727	2870	6965	3666
3.Mango	3435	2886	3980	3344
4.Sweet Orange	1176	1331	1299	1470
5.Cashewnut	814	90	1935	214
6.Tomato	3589	2400	3729	3390
7.Oil Palm	911	1302	980	1400
8.Lemon	1382	583	1472	621
9.Papaya	1220	1488	1574	1920
10.Others	12397		12580	
TOTAL	**35417**		**42686**	
INCREMENT IN GSDP	**1904**		**7269**	
BUDGET (Rs. in Crore)	219		310	

Gro th ngine- anana 1 -1

Sl.No	Name of the District	Area in Ha	Production in MT	Value Rs. In Cr.
1	Kurnool	2000	100000	100.00
2	Kadapa	3200	160000	160.00
3	Anantapur	3000	150000	150.00
4	Chittoor	300	15000	15.00
5	West Godavari	400	20000	20.00
6	East Godavari	100	5000	5.00
7	Guntur	200	10000	10.00
8	Krishna	200	10000	10.00
9	Srikakulam	50	2500	2.50
10	Vizianagaram	150	7500	7.50
11	Visakhapatnam	100	5000	5.00
12	Prakasam	200	10000	10.00
13	Nellore	100	5000	5.00
	Total	10000	500000	500.00

Month ise A ailability of iss e lt re anana Plants (in akhs)

S o	ame of the ompany	April, 1	May, 1	ne, 1	ly, 1	A g s t, 1	Septe mber, 1	tob er, 1	o e mber, 1	e em ber, 1	an ar y, 1	ebr ary, 1	Mar h, 1	otal o of Plants
1	aya Sree io te h Plants, os r	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 75	1 00	6 75
	M s Mi ros n ioplants (India) P t td, yderabad	5 00	6 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	111 00
	itroplant ee dimetla (ill), thb llap r yderabad-	7 50	7 50	7 50	7 50	7 50	7 50	7 50	7 50	7 50	7 50	7 50	7 50	90 00
	M s Sai ara io e hnoligies td eedimetla, yderabad	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	24 00
	M s akshmi iote h, Yelahanka, angalore	0 50	1 00	1 00	1 00	1 50	1 50	2 50	3 50	4 00	5 00	5 00	5 00	31 50
	Grand otal	1	1	1	1	1	1							

Gro th ngine- hillies (1 -1)

- Integrated Pest Management
- Capacity Building for 2 lakh Chillies Farmers
- Custom Hire Center at every village
  - Poly Sheets
  - Solar Dryers
  - Transplanter
- Export Promotion

Additional area nder hillies lti ation for 1 -1

S o	istri t	hillies
1	East oda ari	2000
2	untur	50000
3	Prakasam	12000
4	Kadapa	1000
5	nanthapuram	3000
	A	

Crop wise Action Plan for Micro irrigation for 2015-16

Sl.No	Name of the Crop	Area Proposed in ha
1	Vegetables	25800
2	Chillies	5000
3	Banana	8000
4	Papaya	5000
5	Turmeric	1200
6	Flowers (Open)	1000
7	Sugarcane	9000
8	Cotton	4000
9	Maize	5000
10	Acid Lime	1000
11	Pomegranate	500
12	Sweet Orange	1000
13	Mango	4000
14	Coconut	500
15	Cashew	500
16	Oil palm	7000
17	Sapota	500
18	Guava	500
19	Others (Fig, Ber, Custard Apple, Amla, Aloevera etc.,)	500
20	Sprinklers Crops (Ground nut & Pulses)	20000
	Total	100000

Indicative payment module on Annuity for implementation of Micro Irrigation in 4.00 lakh ha from 2015-16 to 2018-19

Details	2015-16				2016-17				2017-18				2018-19			
	GOI	State Share	Bene. Contribution	Total	GOI	State Share	Bene. Contribution	Total	GOI	State Share	Bene. Contribution	Total	GOI	State Share	Bene. Contribution	Total
Current year	135.00	109.93	157.04	401.97	135.00	109.93	157.04	401.97	135.00	109.93	157.04	401.97	135.00	109.93	157.04	401.97
Arrears of Previous years	0.00	0.00	0.00	0.00	0.00	109.92	0.00	109.92	0.00	219.85	0.00	219.85	0.00	329.77	0.00	329.77
Total	135.00	109.93	157.04	401.97	135.00	219.85	157.04	511.89	135.00	329.78	157.04	621.82	135.00	439.70	157.04	731.74
Interest on amount due to the paid to the MI Companies	0.00	0.00	0.00	0.00	0.00	33.80	0.00	33.80	0.00	56.33	0.00	56.33	0.00	67.60	0.00	67.60
Total with interest	135.00	109.93	157.04	401.97	135.00	253.65	157.04	545.69	135.00	386.11	157.04	678.15	135.00	507.30	157.04	799.34

Details	2019-20				2020-21				2021-22				Total			
	GOI	State Share	Bene. Contribution	Total	GOI	State Share	Bene. Contribution	Total	GOI	State Share	Bene. Contribution	Total	GOI	State Share	Bene. Contribution	Total
Current year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	540.00	439.72	628.16	1607.88
Arrears of Previous years	0.00	329.77	0.00	329.77	0.00	219.85	0.00	219.85	0.00	109.92	0.00	109.92	0.00	1319.08	0.00	1319.08
Total	0.00	329.77	0.00	329.77	0.00	219.85	0.00	219.85	0.00	109.92	0.00	109.92	540.00	1758.80	628.16	2926.96
Interest on amount due to the paid to the MI Companies	0.00	67.60	0.00	67.60	0.00	33.80	0.00	33.80	0.00	11.27	0.00	11.27	0.00	270.40	0.00	270.40
Total with interest	0.00	397.37	0.00	397.37	0.00	253.65	0.00	253.65	0.00	121.19	0.00	121.19	540.00	2029.20	628.16	3197.36

Gro th ngine- omato 1 -1

Additional area nder omato lti ation for 1 -1

Sl o	istri t	omato
1	Visakhapatnam	500
2	East oda ari	100
3	est oda ari	100
4	Krishna	100
5	Prakasam	350
6	hittoor	4000
7	Kadapa	500
8	nanthapuram	1000
9	Kurnool	500
	A	1

Sl. No	Crop	Present Yield Ton/ha	Increased yield due to interventions Ton/ha	% of increase	Interventions
1	Tomato (Poly houses)	20	80	650	Poly houses + Shadenet houses + IPM + Mulching + Fertigation

istri t ise targets for Poly o ses and Shadenet

Sl.No	District	Poly Houses in Sqm	Shadenet in Sqm	Total
1	Srikakulam		2000	2000
2	Vizianagaram			
3	Visakhapatnam	5000	15000	20000
4	East Godavari	2500	15250	17750
5	West Godavari	5000	15000	20000
6	Krishna	10000	20000	30000
7	Guntur	12000	51000	63000
8	Prakasam	8000	30000	38000
9	Nellore			
10	Chittoor	570000	80000	650000
11	Kadapa	20000		20000
12	Ananthapuram	3000	7500	10500
13	Kurnool	22000	35000	57000
	TOTAL	657500	270750	928250

Area pansion nder orti lt re rops

S.No	District	Banana	Chillies	Papaya	Tomato	Onion	Potato	Gourds
1	Srikakulam	50				1000		200
2	Vizianagaram	150						200
3	Visakhapatnam	100			500		2000	500
4	East Godavari	100	2000		100			600
5	West Godavari	400		100	100			200
6	Krishna	200			100			500
7	Guntur	200	50000	500				500
8	Prakasam	200	12000	500	350			500
9	Nellore	100						200
10	Chittoor	300		500	4000		5000	500
11	Kadapa	3200	1000	2200	500	1000		200
12	Ananthapuram	3000	3000	1200	1000	3000		500
13	Kurnool	2000			500	5000		500
	Total	10000	68000	5000	7150	10000	7000	5100

District Wise Postharvest Infrastructure Available in Andhra Pradesh

Sl. No	Name of the District	Cold Storage units		Ripening Chambers		Mango / Fruit Processing units		Cashew Processing units	
		No	Capacity (MTS)	No	Capacity (MTS)	No	Capacity (MTS)	No	Capacity (MTS)
1	Srikakulam	0	0	0	0	0	0	9	99
2	Vijayanagaram	5	32500	0	0	1	125	0	0
3	Vizag	1	6500	3	78	0	0	15	165
4	East Godavari	4	26000	0	0	0	0	5	55
5	West Godavari	2	13000	0	0	0	0	3	33
6	Krishna	26	169000	5	130	3	375	0	0
7	Guntur	77	500500	11	286	0	0	0	0
8	Prakasham	53	344500	3	78	0	0	27	297
9	Nellore	5	32500	1	26	0	0	2	22
10	Chittoor	4	26000	3	78	43	5375	0	0
11	Kadapa	2	13000	14	364	1	125	0	0
12	Ananthapur	8	52000	14	364	0	0	0	0
13	Kurnool	14	91000	25	650	0	0	0	0
Total		201	1306500	79	2054	48	6000	61	671

Identified Vegetable Clusters in AP

S.No	District	Name of the Potental mandals	Market Source
1	Srikakulam	Ponduru eeraghattam Etcherla Srikakulam rural	Srikakulam Barampuram
2	Vizianagaram	Mentada Ramabhadrapuram Nellimerla Bondapalli	Vishakapatnam Vzn local
3	Vishakapatnam	nandapuram Sabba aram K Kotapadu raku umbriguda ukumpeta	
4	East oda ari	Korukonda Seetanagaram Rajanagaram Kadium Tallapudi lamuru Ra ulapalem treyapuram Tuni malapuram lla aram yina illy Kotanandu ru Kakinada rural Pithapuram ollaprolu Sanka aram	Rajahmundry Ra ulapalem malapuram Kakinada Tuni
5	est oda ari I	Peda egi hintalapudi	Eluru local
6	est oda ari II	warakatirumala Nallajerla Pera ali	Eluru
7	Krishna	konduru Totla alluru	Vijayawada
8	untur I	Narakoduru Mangalagiri	yderabad Bengulu ru hennai
9	untur II	Yedlapadu Kothapalem Konda eedu	untur yderabad
10	Prakasam I	Marturu	Marturu ngole RBz Rollapalem
11	Prakasam II	santamanguluru J ponguluru Ballipura a Kothapatnam ngole iddalaluru Besta aripeta Kuruchapadu	Marturu ngole RBz iddaluru
12	Nellore I	Nellore Rural Naidupeta zili Podalakuru uduru Saidapuram ekkili Tellakuru	uduru Nellore Naidupeta
13	Nellore II	Kaligiri Ka ali Indukurpeta	Nellore Krishna untur hennai
14	hittoor I	Penumuru udipala Madanapally Kuppam Vayalpadu	hennai Bengulu ru ydearbad
15	hittoor II	urramkonda Kalikiri Kayalguda KVB Puram ST Narana anam S	hennai Bengulu ru Tirupati Madanapally
16	Kurnool I	Kalluru Kurnool Nandikotkuru r akallu Tapipalem	yderabad oastal districts
17	Kurnool II	Kodumuru	yderabad
18	Kadapa I	Pendlimarri K inne	Kadapa town
19	Kadapa II	Mydukur u uru	Vijayawada Nellore hennai
20	nantapur I	BK Samudram arladinne Kalaynadurg Raidurgam Pamidi Kambuluru	Kolar yderabad Bengulu ru Madanapally
21	nantapur II	Kadiri Indupur Penukonda harma arm Tanakallu Nallacherla	Bengulu ru hennai

Identified Farmer Groups

S.No	District	Number of groups
1	Krishna	15
2	Visakhapatam	4
3	West Godavari-2	6
4	Guntur-1	8
5	Chittor-2	1
6	Chittor-1	14
	Total	48

dget e irement for 1 -1

Rs in rores

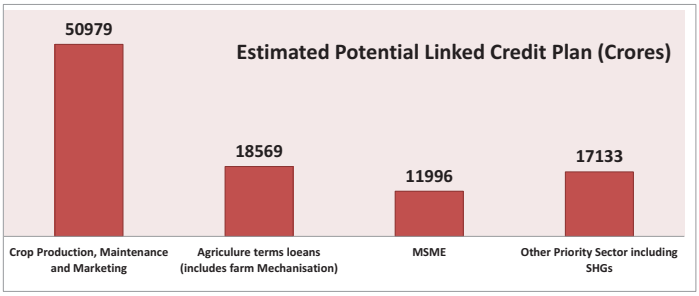
Sl. No	Name of the Scheme	Central Share	State Share	Total	Major components to be covered	Budgted/ budget to be provided
1	Mission for Integrated Development of Horticulture(MIDH) (75:25)	56.25	18.75	75.00	PHM, Protected cultivation, Farm Ponds, Farm Mechanization & Area expansion, Plastic Mulching..	Budgeted
2	Promotion of Horticulture Activities (State Plan) (0:100)	0.00	210.00	210.00	Area expansion for 5,000 Ha., Protected Cultivation for 1200 acres, Machinery service stations for 1000 Nos, Pesticide residue testing labs for 3 Nos, Promotion of FPPOs. Creation of water resources and form ponds.	Budgeted
3	Rashtriya Krishi Vikas Yojana (RKVY) (50:50) *	29.135	29.135	58.25	Value chain for vegetables, promotion of farmers groups, production to market linkages	GOI revised the budget sharing pattern 50:50 from this financial year only hence state share of Rs 29.135 crores has tobe provided by state govt.
4	National Mission on Oilseeds and Oilpalm Programme (NMOOP) (50:50) *	36.55	36.55	73.10	Oilpalm area expansion for 12,000 Ha.,	GOI revised the budget sharing pattern 50:50 from this financial year only hence state share of Rs 36.55 crores has tobe provided by state govt.
5	On Farm Water Management Programme (OFWM) – APMIP (Differential Subsidy Pattern) *	135.00	439.70	574.70	Micro Irrigation for 1 Lakh Ha. On annuity basis.	Budget to be provided by state govt is Rs 109.93 Crores for 15-16 if implemented on annuity. State share of Rs.132.93 Crores has to be reelased for the installed systems in 36122 Ha during 2014-15
	Total	258.935	734.135	993.07		

Budget provided by Agriculture Department

Credit Plan

1. Crop Production, Maintenance and Marketing
2. Farm Mechanization
3. Milk, Meat, Egg , Poultry & Fisheries

Sector wise Potential Linked Credit Plan



Crop Production, Maintenance and Marketing:

1. Seed rolling plan to be prepared to assess variety wise requirement and production
2. Extension reforms through Micro ATM and motivation of farmers through the Rythu Chainya Yatra, conferences, Adarsh Rythu Awards
3. Implement innovative practices and organizing marketing of the produce
4. Custom hiring centrers in farmers groups may be promoted
5. Provide more credit through the Group Model

Mechanization Sector – Revised for 2015-16 (Rs. Crores)

1. To increase Production and Productivity, There is immense potential in Agriculture sector through the Tractors , Power Tiller, Rotavators, Paddy Tran planters, Threshers, Combine Harvesters, Seed Drills AND other equipments.
2. AP is to promote farm mechanization with the support of financing banks
3. Subsidy is available under RKVY, Normal State Plan, Nation Mission on Agri-extension & Technology and National Food Security Mission.

Activity	Physical units	Financial Outlay	Bank Loan
Tractors	27675	1587	1317
Power Tillers	13970	285	247
Combined Harvesters	450	112	86
Custom Hiring Centres	761	51	37
Maize dehusker cum Sheller	696	5	3
Groundnut Mechanization	1780	44	34
Paddy Mechanization	6473	96	67
Sugarcane Mechanization	100	5	4
Others (tillage equipment, seed drills and rotovators, etc.	70963	445	353
TOTAL	122844	2635.66	2151.78

Potential Estimated for Milk, Meat, Egg , Poultry & Fisheries

Sector	AP Rank in India	Production	Credit Projections
Milk	7	90.82 lakh MT	4276.55
Meat	4	4.89 lakh MT	1316.22
Egg	2	12727 Million	
Poultry		817 lakh	1098.23
Total			6691. 00 Crores

Sl.No	Activity	Phy. Units	Financial (Crore)
1	Inland Fisheries	20523	109.87
2	Fresh water prawn farming	1319	38.59
3	Brackish water prawn farming	2725	73.44
4	Marine Fisheries	5661	48.20
5	Others (nets, tricycles, ice boxes, retail outlets, etc.	76735	1532.63
Total		1,06,963	1802.73

Key Points

<u>Establishing PSU:</u>

NABARD may be entrusted for monitoring and oversee the implementation of credit plan at ground level in the state

<u>Milk, Meat, Egg & Poultry</u>

1. Buffaloes and cows account for 69% and 31 % of total milk production in the state
2. The per capita availability of milk is estimated at 289 gm/day, is comparable to nation average of 296 gm/day for 2012-13
3. Poultry, buffaloes, sheep and goats accounted for 61%, 12%, 18.5% and 8.2% of total meat production during 2013-14
4. Activity based Producer Organizations for could be promoted
5. Setting up of livestock markets with all infrastructure facilities
6. Promoting quality mulch animals and calf rearing needs with incentives

<u>FISHERIES</u>

1. Licensing of brackish water shrimp farming units and fresh water
2. Demarcation of brackish water area
3. Banks are not coming forward to support due to absence of insurance companies
4. Create demand and hygienic retail outlets for domestic & international market
5. Development of all male tilapia culture and reservoir fisheries

Forests

GVA at current prices

(in Crore)

S.No.	Item	2013-14	2014-15	2015-16	% *
1.	Major Forest Produce	91.33	415.19	1000	1006 %
2.	Fire wood	0.65	0.75	0.80	39 %
3.	Minor Forest Produce	91.16	44.11	283	835 %

District Plan and Financial requirements

S.No.	District Plan	Financial Plan (Available) in Crore	Financial Plan (Required in addition) in Crore
1.	Anantapur	0	
2.	Kadapa	0	1
3.	Chittoor	2	1
4.	Kurnool	0	1
5.	West Godavari	0	1
6.	East Godavari	1	0
7.	Krishna	0	0
8.	Guntur	0	0
9.	Visakhapatnam	1	0
10.	Vijayanagaram	0	0
11.	Srikakulam	0	0
12.	Nellore	0	1
13.	Prakasham	0	1.5
	Total	**4**	**6.5**

Irrigation

Action Plan 2015-16
Major and Medium Projects

Sl. No.	Name of the Projects	Balance IP to be Created (Programme) (in Acres)		I.P Likely to be Created in Khariff/Rabi 2015-16 (in Acres)		Remarks
		New	Stab	New	Stab	
1	HNSS- Phase-I	184178	0	84178		
2	Thotapally	135000	0	135000		
3	Gundlakamma Reservoir	20010	0	20010		
4	Pushkaram LI Scheme	40055	0	40055		
5	Tadipudi LI Scheme	53056	0	53056		
6	HNSS- Phase-II	Main Canal from Jeedipally reservoir to Punganur Br. Canal will be completed and water will be released into canal.* Ayacut will be created in 2016-17				
7 a)	Lift on Godavari at Pattiseema	Water will be lifted and supplied to Prakasam barrage through Polavaram Right Main Canal.				
b)	Polavaram Right Main Canal	The canal works will be completed and water will be supplied to Prakasam Barrage.				
8	GNSS Phase I	34000	0	0	0	The Gandikota Reservoir and the main canal from Pothireddypadu head regulator to Gandikota Reservoir will be completed and water will be stored in Gandikota.
9	Pula Subbaiah Veligonda	Tunnel I will be completed and Nallamala Sagar Resevoir would be filled up. Ayacut will be created in 2017-18				
10	B.R.R.Vamsadhara Stage II-Ph-II	The side weir, flood flow canal and Hiramandalam Reservoir are programmed to be completed during 2015-16 and Ayacut will be created during 2016-17.				
11	Venkatanagaram Pumping Scheme	19109	10641	0	0	Ayacut will be created during 2016-17.
	Total	485408	10641	332299	0	

Abstract
Action Plan (2015-16 & 2016-17)

S. No.	Year	Balance IP to be Created (Programme) (in Acres)		I.P Likely to be Created in Khariff/Rabi (in Acres)	
		New	Stab	New	Stab
1	2015-16	485408	10641	332299	0
2	2016-17	793887	59921	793887	59921
	Total	1279295	70562	1126186	59921

NTR Jala Siri
2015-2017

Rural Development Department
Andhra Pradesh

Objectives - NTR Jala Siri

- Developing 10.8 lakh acres of command and non-command area through 1.90 lakh borewells.
- Major anti-poverty initiative expected annual income per HH not less than Rs.20,000 per acre & added value income of Rs.30,000/- to the GSDP. ((0.2*10.8+0.3*10.8)=5400Cr)
- Not only GW extraction but GW recharge as well.

Area	Ayacut (lakh acres)	No. of wells (Lakh)	Ayacut(Acres) under each borewell
Command	7.80	1.30	6 Acres
Non-Command	3.00	0.60	5 Acres
Total	**10.80**	**1.90**	

✓ Income generation through proposed NTR Jala Siri Programme will be Rs.5400 Cr. by spending Rs.2207.00Cr.

Components of NTR Jala Siri

✓ **Micro-Irrigation**

- To irrigate more area with same amount of water, Micro-Irrigate techniques like Sprinkler and drip are required. Estimated for 50% of the total area irrigated under new wells with Micro Irrigation.

✓ **Ground Water recharging**

- No Ground water structure (Bore Well/ Tube Well) would taken up in the over exploited areas.
- Bore Wells shall be taken up only as supplementary or distress irrigation.
- Multi cropping shall be encouraged whereas the high water intensive crops like paddy, sugarcane etc. Under flood irrigation from bore wells shall not be encouraged and encourage these crops under MIP only.
- Priority should be given to only irrigated dry crops/horticulture including vegetable cultivation with sprinkler or drip shall be taken up.

❖ Selection Criteria:

❑ **Selection of beneficiaries :**

- As drilling of bore well is proposed under MGNREGS funds beneficiaries should be prioritized as : SC, ST, and Small and marginal farmers.

❑ **Contribution from beneficiaries**

- 5% cost from SC/ST farmers and 20% from other Small and Marginal farmers.

District wise GW feasible wells

Sl. No	Name of District	Considering the spacing stipulations as per WALTA Act, Quality problems, water adequacy areas, tentative feasible wells		
		Command Area	Non-Command Area	Total Additional wells
1	Srikakulam	9255	6910	16165
	Vizianagaram	8475	9531	18006
	Visakhapatnam	1070	7583	8653
	East oda ari	11035	5014	16049
	est oda ari	11948	1834	13782
	Krishna	18084	322	18406
	untur	18249	617	18866
	Prakasam	15223	4001	19224
	Nellore	17067	7463	24530
1	hittoor	1020	2650	3670
11	Kadapa	1707	3843	5550
1	nanthapur	2335	1544	3879
1	Kurnool	15042	8570	23612
	otal:	1 1		1

Abstract –NTR Jala Siri -2015-2017

Area	Acres (Lakhs)	No of Bore Wells lakhs	MGNREGS Rs. Crores	NABARD/RIDF. Rs. Crores	5% SC&ST farmers + 20% S&M farmers contribution (Cr)	Total outlay Rs. Crores
Command area	7.80	1.30	391.53	916.00	18+241=259	1566.12
Non Command area	3.00	0.60	269.47	630.41	12+166 =178	1077.88
Total	**10.80**	**1.90**	**661.00**	**1546.41**	**436.59**	**2644.00**

* Income Generation per acre Rs.20,000/- 10.80 X 20K = 2160.00 Cr Income.
*Value Added per acre Rs.30,000/- 10.80 X 30K = 3240.00 Cr. Added Value
*Total Rs.50,000/- Total Rs. 5400.00 Cr
* Income generation through proposed NTR Jala Siri Programme will be Rs.5400 Cr. by spending Rs.2207.00Cr.

Funding pattern for NTR Jala Siri

Command Area

No. of Bore Wells proposed	EGS Funding			NABARD/ RIDF Govt. Funding		Total Outlay (Cr.)
	Material Component	Labor Component	Total EGS Rs. in Cr.	Total NABARD/ Govt. Rs. in Cr.	5% SC&ST farmers + 20% S&M farmers contribution (Cr)	EGS & NABARD/ Govt. Rs. in Cr.
	BWs Drilling Rs. in Cr.	Check Dams / Pits Rs. in Cr.				
130510	326.28	65.26	391.53	916.00	258.59	1566.12

Non- Command Area

No. of Bore Wells proposed	EGS Funding			NABARD/ RIDF Govt. Funding		Total Outlay (Rs. in Cr.)
	Material Component	Labor Component	Total EGS Rs. in Cr.	Total NABARD/ Govt. Rs. in Cr.	5% SC&ST farmers + 20% S&M farmers contribution (Cr)	EGS & NABARD/ Govt. Rs. in Cr.
	BWs Drilling Rs. in Cr.	Check Dams / Pits Rs. in Cr.				
59884	239.53	29.94	269.47	630.41	178.00	1077.88

Navyandhra Jala Prabha

Rural Development Department, Andhra Pradesh.

NJP - Objectives

- Developing 2.19 lakh acres of fallow land benefiting 2.89 lakh SC/ST farmers
- Rs. 385.55 crores sanctioned under Phase-I.
- Bringing land under cultivation by providing Irrigation Facilities.
- Sharing of Ground water
- Micro Irrigation practices
- Reduction of migration
- Major anti-poverty initiative (expected annual income per HH not less than Rs. 20,000/- per acre)
- Equity in access of groundwater
- Convergence with MGNREGS to improve asset quality
- Not only GW extraction, but recharge as well

Sanctions status

- Financial and Physical targets distributed based on sanctions accorded to individual districts.

Sno	Description	Project cost (Rs. in crores)	Releases (Cr)	Expenditure (Cr)
1	Financial			
	NABARD RIDF-XVII	198.80	149.15	99.15
	MGNREGS	186.75	64.56	64.56
	Total	**385.55**	**213.71**	**163.71**

NJP – Physical Progress
upto 20-04-2015

Description	Physical Progress
Target Area (lakh acres)	2.19 lakh acres
Ground water survey done	2.55 lakh acres
Drilled Bore Wells	11712 nos.
Irrigation sources requiring energisation	9672 nos.
Energisation completed	5454 nos.
Area brought under irrigation	0.96 lakh acres
BW recharge structures completed	3911 nos.

Summary

Navyandhra jala Prabha

Year	Expenditure under RIDF/Govt. Share Rs. Cr.	Expenditure under MGNREGS Rs. Cr.	Total expenditure Rs. Cr.	Area developed Lakh acres	Income generation Rs.Cr.	Value added Rs.Cr.	Total of income and value added Rs. Cr.
2014 on wards	99	65.00	164	60	120	180	300
2016 onwards	100	70.00	170	75	150	225	375
Total	**199**	**135.00**	**334**	**135**	**270**	**405**	**675**

NTR Jala Siri Proposed Project

Year	Expenditure under RIDF/Govt. Share Rs. Cr.	Expenditure under MGNREGS Rs. Cr.	Total Project cost Rs. Cr.	Area proposed lakh acres	Income generation Rs.Cr.	Value added Rs.Cr.	Total of income and valu added Rs. Cr.
1st year onwards	773.21	330.00	1103.21	5.40	1080	1620	2700
2nd year onwards	773.20	331.00	1104.20	5.40	1080	1620	2700
Total	1546.41	661.00	2207.41	10.80	2160.00	3240.00	5400

* Income Generation per acre Rs.20,000/-
*Value Added per acre Rs.30,000/-
*Total Rs.50,000/-

ACTION PLAN 2015-16

Department of Agriculture
East Godavari district

1

Comparison statement of Area, Yield, Production and GVA - 2014-15 & 2015-16

S.No	Name of the Crop	2014-15			GVA (Cr)	2015-16			GVA (Cr)	% GVA
		Area (Ha)	Yield (Kg)	Production (MTs)		Area (Ha)	Yield (Kg)	Production (MTs)		
1	Paddy	395364	5891	2329063	3168	413458	6481	2679811	3645	15
2	Jowar	2060	1037	2137	3	1842	1160	2137	3	0
3	Bajra	58	1183	69	0	60	1183	71	0	0
4	Maize	13256	8288	109861	144	16571	8224	136281	179	24
5	Ragi	432	750	324	1	430	750	323	0	0
	Coarse Grain	**411170**	**17149**	**2441454**	**3315**	**432361**	**17799**	**2818622**	**3827**	15
6	Redgram	2164	600	1298	6	2200	600	1320	6	0
7	Greengram	1432	677	969	4	1500	524	786	4	0
8	Blackgram	15242	741	11301	49	19228	742	14272	62	27
	Total Pulses	**18838**	**2018**	**13569**	**59**	**22928**	**1866**	**16377**	**71**	20
	Total Foodgrains	**430008**	**19167**	**2455022**	**3375**	**455289**	**19665**	**2834999**	**3898**	15
9	Groundnut	153	1744	267	1	149	2452	365	1	0
10	Sesamum	3295	222	731	3	3450	222	765	4	33
	Total Oilseeds	**3448**	**1966**	**998**	**9**	**3599**	**2673**	**1130**	**5**	-44
11	* Cotton	22433	812	74557	280	22500	812	85632	321	15
12	Sugarcane	14728	96000	1413888	240	13425	96000	1288800	219	-9
13	Tobacco	3394	2832	9612	31	3400	3068	10431	33	6
	Other crops	40555	99644	1498057	551	39325	99880	1384863	574	4
	Total Cropped Area	**474011**	**120777**	**3954078**	**3934**	**498213**	**122218**	**4220992**	**4477 (543Crs)**	14

2. CONSTRAINTS AND INTERVENTIONS PROPOSED FOR TO ACHIEVE THE DOUBLE DIGIT GROWTH
&
3. BUDGET AVAILABLE AND REQUIREMENT FOR 2015-16

Paddy

S. No	Major Constraint noticed	Interventions Proposed	Area (Ha) or Units	Departmental schemes to be converged	Budget (Lakhs)	
					Available	Requirement
1	Delayed sowings/ Canal water shortage in tail end areas	1. Early release of water 2. Rotation system of water management. 3. Encouraging Community nurseries in Tail end areas.	- - Targeted area 237 Ha	1&2.Will be sorted out with the intervention of the District Collector and Irrigation Dept.		
2	Indiscriminate use of fertilizers	GPS based soil sample collection Recommendation of timely and balanced application of NPK fertilizers based on Soil test Data results	30,500 (16,000)	Field Demos, Educating farmers through Polam pilustundi, Chandranna Rythu kshetrams through intensive soil testing Programme.	-	10

S. No	Major Constraint noticed	Interventions Proposed	Area Proposed in Ha	Departmental schemes to be converged	Budget (Lakhs)	
					Available	Requirement
3	Cultivation of age old varieties prone to lodging, pests and Diseases (MTU-7029, BPT-5204)	Promoting the cultivation of Non Lodging New Varieties like MTU-1064, MTU-1061, MTU-1075 & OTHER RP BIO 226	21569 Qtls 13151Ha 8330 Ha 8329 Ha 4164 Ha 6621 Ha	Awareness through Polam Pilusthondi Programme, Minikits, Supply of subsidy seed through APSEED &Seed Village Scheme.	Nil	30.19
4.	Deep Planting	Adoption of Shallow planting and encouraging power tillers and rotovators for puddling which prevents deep planting of seedlings.	49080 (1200 PTs)	Supply of farm machinery through NSP, SMAM, RKVY	288.96	900 (1500 PTs)

S. No	Major Constraint noticed	Interventions Proposed	Area Proposed in Ha	Departmental schemes to be converged	Budget (Lakhs)	
					Available	Requirement
5	Planting methods for optimum population	Encouraging drum seeder technology and SMSRI –Direct sowing. Drum seeder SMSRI Direct sowing	1326 2952 33630	Awareness through Polam Pilusthondi programme, Chandranna Rythu Ksetralu	Nil	89.50 (CRKs)
6	Correction of Micro nutrient Deficiency	By application of Micro nutrients like Zinc Sulphate, Boron, Gypsum in Micronutrient deficient soils (10000 Ha, 500 Mt)	30000 (1500 Mt)	Awareness through Polam Pilusthondi programme, Chandranna Rythu Ksetralu and Bhuchetana.	52.22	200 (102.41)

S. No	Major Constraint noticed	Interventions Proposed	Area Proposed in Ha	Departmental schemes to be converged	Budget (Lakhs)	
					Available	Requirement
7	Poor weed management	Recommending Integrated weed Management practices	33630 Ha	Awareness through Polam Pilusthondi programme, Chandranna Rythu Ksetralu .	Nil	35.00
8	Low organic matter	Recommendation of Green manure seed like Pillipesara, Sunhemp, Dahincha in Rice fallow fields during summer. Recommending organic source of fertilizers like Vermi compost, Azospirellum, Azatobactor, PSB.	Green Manure – 23,714 Ha (5 200) V Compost 58 Units	Awareness through Polam Pilusthondi programme, Chandranna Rythu Ksetralu and ATMA trainings.	Nil	125.00
9	Non availibility of Credit to tenant farmers	Discouraging the private finance and encouraging the banking sector Formation of Tenant famers into RMGs & JLGs to avail crop loans through PACS and Banks 55 Crores (33058)	100 Cr (67000) farmers)	Conducting awareness programmes through special campaigns and Polam pilustondi	Nil	Nil

S.No	Major Constraint noticed	Interventions Proposed	Area Proposed in Ha	Departmental schemes to be converged	Budget (Lakhs)	
					Available	Requirement
10	Promotion of Red Gram	Encouraging pulse crops such as Redgram on Paddy field bunds, on the bunds of commercial crops such as Cotton, Tobacco, Tapioca	25000 (9000)	NFSM Demonstrations. (3-4 Qtls per acre yield)	Nil	237.20
11	Post Harvest Losses	Minimise the post harvest losses through supply of harvestors and Dryers. Combined Harvesters 35, Dryres 15,	30240 (25440) Chs-50 Driers – 20	Promotion of FM on Large scale to reduce Cost of Cultivation, Labour problem, and Time saving	288.96	73.74
12	Indescreminate use of pesticides	Recommendation of Need based pesticides and IPM practices to farmers and creating awareness about usage of Neem oil, Neem cake	27000 (17993)	Awareness through Polam Pilusthondi Programme Chandranna Rythu Ksetralu and ATMA trainings	174.36 (NFSM)	151

COTTON

S. No	Major Constraint noticed	Interventions Proposed	Area Proposed in Ha	Departmental schemes to be converged	Budget (Lakhs)	
					Available	Requirement
1	Non maintainenace of optimum plant population	Increasing Plant density by adopting 700 g/acre seed rate instead of Local practice of 450 g/acre.	9670 (7200)	Chandranna Rythu Kshetral and Polam Pilustondi.	---	49.44 (Polam Pilustundi)
2	Sucking pest damage	Promoting Stem application of pesticides against sucking pests	6700 (4900)	Chandranna Rythu Kshetral and Polam Pilustondi.		

SUGAR CANE

S. No	Major Constraint noticed	Interventions Proposed	Area Proposed in Ha Area sown	Departmental schemes to be converged	Budget (Lakhs)	
					Available	Requirement
1	Non usage of appropriate Seed matrerial	Adoption of single bud sets for planting	3000 (1512)	Chandranna Rythu Kshetral and Polam Pilustondi.		
2	Seed treatment not being adopted	Seed treatment with Malathion and Carbendazim	6100 (2700)	Chandranna Rythu Kshetral and Polam Pilustondi.		

MINOR MILLETS

S.No	Major Constraint noticed	Interventions Proposed	Area Proposed in Ha	Departmental schemes to be converged	Budget (Lakhs)	
					Available	Requirement
1	Less Area (Maize) Less area	Promoting Hybrids in Maize in upland & agency areas & Zero tillage in Delta areas Maize Jowar Ragi Korra & Sama	3000 (755) 1200(310) 600(406) 150(58)	Seed subsidy to be enhanced Seed on Subsidy under INSIMP & NFSM schemes.		30.00

PULSES

S. No	Major Constraint noticed	Interventions Proposed (PULSES)	Area Proposed in Ha	Departmental schemes to be converged	Budget (Lakhs)	
					Available	Requirement
1	Delayed Paddy sowings	Increasing the area under Summer Pulses through early sowing of Paddy	8000 (5000)	Will be sorted out with the intervention of the District Collector and Irrigation Dept.	100	234
2	YMV resistant varieties not adopted	Varietal replacement with new varieties like PU 31, MASH 338 in Black gram, LGG 460, WG 37 in Green gram High yielding and resistant to YMV.	15000 (10000)	NFSM and Contingency plan		

OIL SEEDS

S. No	Major Constraint noticed	Interventions Proposed	Area Proposed in Ha	Departmental schemes to be converged	Budget (Lakhs)	
					Available	Requirement
1	Less Area under Oil Seeds	Increasing area under Oil seeds under NMOOP Supplying varieties lik YLM 17 & YLM 66, Gouri in Sesamum and K 6, Dharani in Ground nut Sesamum Groundnut	2800 (436) 126(27)	NMOOP NMOOP seed from APSSDC.	Nil	18.40

4. Policy support Required Components

1. Need based release of Canal Irrigation water in consultation with the Agriculture Department.
2. Targets and guidelines under various schemes to be finalized and communicated well in advance.
3. Budget allocation to be made before the commencement of season.
4. Seed subsidy to be extended to new varieties such as MTU 1061, MTU 1064, MTU 1075 and RP BIO 226 both under General distribution and Seed Village Scheme.
5. Permission to procure area specific inputs from local institutions.
6. Providing mobility to the Extension functionaries for effective implementation of schemes.
7. Release of budget to the current accounts instead of PD Accounts to avoid operational problems in the treasury.
8. Construction of common threshing floors and trunk roads in tail end areas to avoid cyclone damage.

5. Statement of Percentage of Growth in Agricultural crops from 2013-14 to 2015-2016

East Godavari		2013-14	2014-15	% of Growth	2015-16 (Expected)	
S.No	Name of the Crop	GVA (Crores)	GVA (Crores)		GVA (Crores)	% of Growth
1	Paddy	2319	3168	37	3645	15
2	Jowar	3	3	0	3	0
3	Bajra	0	0	-8	0	3
4	Maize	93	144	55	179	24
5	Ragi	2	1	-74	0	0
Coarse Grain		2417	3315	37	3827	15
6	Redgram	0	6	1112	6	2
7	Greengram	6	4	-24	4	-19
8	Blackgram	7	49	600	62	26
	Total Pulses	13	59	345	71	21
Total Food grains		2431	3375	39	3898	16
9	Groundnut	3	1	-60	1	37
10	Sesamum	1	3	360	4	5
Total Oilseeds		3	9	153	5	-42
11	* Cotton	77	280	265	321	15
12	Sugarcane	163	240	48	219	-9
13	Tobacco	6	31	405	33	9
	Other crops	246	551	124	574	4
Total Cropped Area		2680	3934	47	4477	14

WELCOME

DEPARTMENT OF HORTICULTURE

EAST GODAVARI DISTRICT

Area, Production & Productivity for 2014-15 & 2015-16

HORTICULTURE CROPS - GROWTH

CROP	Area in ha			Production in M.Tonns			Productivity (MT / HA)		
	2014-15	2015-16	% growth	2014-15	2015-16	% growth	2014-15	2015-16	% growth
FRUITS	39105	42702	9.20	438465	531382	21.20	11.21	12.44	10.97
PLANTATIONS	110311	116627	5.72	790099	895775	13.37	7.16	7.68	7.26
TUBER CROPS	15551	17500	12.53	236465	288750	22.00	15.20	16.50	8.55
VEGETABLES	8847	9730	10.00	159750	194600	23.00	18.05	20.00	10.80
FLOWERS & SPICES	2586	3079	19.06	17901	21683	21.12	6.92	7.04	1.73
TOTAL	1,76,400	1,89,638	7.50	16,42,680	19,32,190	17.62	9.31	10.19	9.45

Critical Issues

- Low productivity
- Poor quality of the produce including food safety issues
- Inadequate availability of quality seed & planting material of improved varieties
- Emergence of diseases & pests – climate change
- Slow pace in adoption
- Inadequate infrastructure facilities for post harvest management
- Environmental concerns due to indiscriminate use of inputs
- Climate change- hailstorm, drought, high moisture, frost
- Lack of adequate trained manpower

Annexure-II

PRIMARY SECTOR MISSION (HORTICULTURE) - 2015-16

Additional Area Proposed during 2015-16 to Achieve Double Digit Growth (i.e.30%)on the existing Dist.GDP

Name of the District: EASTGODAVARI

Sl. No	Name of the Crop	Units No/ Sq.mt/ Ha	Additional Area Proposed (Ha) (2015-16)	Expected increase in Production by the following Interventions (MTs/Ha)	Expected increase in Productivity by the following Interventions (MTs/Ha)	Average Market Price (Rs.Mts) (based on 2014-15 prices	Total value (Rs.in Lakhs) (6*8)	Financial Budget requirement (Rs. In Lakhs)	Interventions proposed to increase Production /Productivity
I.	Short term Crops								
1	T.C. Banana	Ha	100	6000	60	7500	450	37.50	
2	Papaya	Ha	260	19500	75	8710	1698	46.80	
3	Tomato	Ha	125	3750	30	18000	675	23.43	
4	Onion	Ha	20	300	15	15800	47	0.60	
5	Red Chilies	Ha	0	0	0	0	0	0	
6	Potato	Ha	0	0	0	0	0	0	
7	Turmeric	Ha	20	300	15	70000	210	4.00	
8	Pine Apple	Ha	10	0	0	0	0	0	
9	Water Melon	Ha	0	0	0	0	0	0	
10	Musk Melon	Ha	0	0	0	0	0	0	

Page-2

Sl. No	Name of the Crop	Units No/ Sq.mt/ Ha	Additional Area Proposed (Ha) (2015-16)	Expected increase in Production by the following Interventions (MTs/Ha)	Expected increase in Productivity by the following Interventions (MTs/Ha)	Average Market Price (Rs.Mts) (based on 2014-15 prices	Total value (Rs. in Lakhs) (6*8)	Financial Budget requirement (Rs. In Lakhs)	Interventions proposed to increase Production /Productivity
11.	Major 5 Veg. Crops(Specify)								
a.	Brinjal	Ha	50	700	14	20800	146	1.50	
b.	Bhendi	Ha	40	160	4	20100	32	1.20	
c.	Gourds	Ha	40	400	10	24000	96	1.20	
d.	Cabbage	Ha	0	0	0	0	0	0	
e.	Cauliflower	Ha	0	0	0	0	0	0	
12.	Major 5 Flower Crops (Specify)	Ha							
a.	Chrysanthemum	Ha	30	240	8	74000	178	4.80	
b.	Marigold	Ha	40	200	5	86000	172	6.40	
c.	Jasmine	Ha	10	40	4	103300	41	1.60	
d.	Tuber rose	Ha	40	160	4	42000	67	16.00	
e.	Crossandra	Ha	10	30	3	1480000	444	1.60	
f.	13.Other if any (specify)	Ha	0	0	0	0	0	0	
	Sub total		795	31780	39.98		4257	146.63	

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Sl. No	Name of the Crop	Units No/ Sq.mt/ Ha	Additional Area Proposed (Ha) (2015-16)	Expected increase in Production by the following Interventions (MTs/Ha)	Expected increase in Productivity by the following Interventions (MTs/Ha)	Average Market Price (Rs.Mts) (based on 2014-15 prices	Total value (Rs. in Lakhs) (6*8)	Financial Budget requirement (Rs. In Lakhs)	Interventions proposed to increase Production /Productivity
13.	Poly House cultivation (sqmt)	sqmts							
a.	High value vegetables	sqmts	2400	19200	8	40000	7680	5.04	
b.	High value Flowers.	sqmts	0	0	0	0	0	0	
14.	15.Shade Net Houses (sqmt)	sqmts					0	0	
a.	Nurseries	sqmts	1000	0	0		0	7.10	
b.	High value Vegetables.	sqmts	3000	24000	8	40000	9600	21.30	
c.	High Value Flowers	sqmts	1000	6000	6	120000	7200	7.10	
	Sub total		7400	49200	6.65		24480	40.54	

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Sl. No	Name of the Crop	Units No/ Sq.mt/ Ha	Additional Area Proposed (Ha) (2015-16)	Expected increase in Production by the following Interventions (MTs/Ha)	Expected increase in Productivity by the following Interventions (MTs/Ha)	Average Market Price (Rs.Mts) (based on 2014-15 prices	Total value (Rs. in Lakhs) (6*8)	Financial Budget requirement (Rs. in Lakhs)	Interventions proposed to increase Production /Productivity
II.	Long term Crops								
1.	Mango	Ha	350	0	0		0	63.00	
2.	Cashew	Ha	100	0	0		0	12.00	
3.	Sweet Orange	Ha	35	0	0		0	6.30	
4.	Acid Lime	Ha	0	0	0		0	0	
5.	Pomegranate	Ha	0	0	0		0	0	
6.	Sapota	Ha	0	0	0		0	0	
7.	Guava	Ha	60	0	0		0	10.800	
8.	Cocoa	Ha	350	0	0		0	42.000	
9.	Coconut	Ha	250	0	0		0	20.000	
10.	Oil Palm	Ha	2400	0	0		0	480.000	
11.	Other if any (specify)	Ha	0	0	0		0	0	
	Sub-Total		3545	0	0	0	0	634.10	
	Grand Total		11740	80980	6.90	0	28737	821.27	

Annexure-III

PRIMARY SECTOR MISSION (HORTICULTURE) - 2015-16

Interventions Proposed during 2015-16

Name of the District: EASTGODAVARI

Sl. No	Name of the Crop	Trallies Cultivation		Pendals		Canopy Management		Rejuvanation		IPM	
										Vagetables (in Ha)	
		Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs
1	Tomato	20	3.75	0	0	0	0	0	0	0	0
2	Major Veg.	0	0	50	62.50	0	0	0	0	100	7.50
	Total-1	20	3.75	50	62.50	0	0	0	0	100	7.50

Page-2

Sl. No	Name of the Crop	IPM		Canopy Management		Shadenet				Protected Cultivation			
						Vagetables (in Ha)		Fowers (in Ha)		Vagetables (in Ha)		Fowers (in Ha)	
		Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs
1	Capsi-cum	0	0	0	0	3000	21.30	0	0	3000	21.30	0	0
2	Mango	1000	75.00	200	40.00								
	Total-2	1000	75.00	200	40.00	3000	21.30	0	0	3000	21.30	0	0

Achievements of MI installations '2014-15

S.No	Name of the Crop	Area in Ha.
1	Oil Palm	660.93
2	Mango	50.65
3	Banana	38.64
4	Citrus/ Sweet Orange	12.19
5	Cashew	40.08
6	Coconut	92.69
7	Papaya	9.31
8	Guava, Custard Apple etc.,	9.55
9	Vegetables	10.84
10	Mulbery	7.57
11	Sugarcane	34.59
12	Fodder, Sesamum and Pulses	107.53
	Total :	1074.57

Proposed Action Plan 2015-16

S.No	Name of the Crop	Area in Ha.	Financial Outlay (Subsidy) Rs. in Lakhs
1	Oil Palm	1100	399.38
2	Mango	85	28.29
3	Banana	90	78.81
4	Citrus/ Sweet Orange	80	25.52
5	Cashew	35	11.17
6	Coconut	110	30.25
7	Papaya	25	20.11
8	Guava, Custard Apple etc.,	15	4.79
9	Vegetables	65	71.50
10	Mulbery/Cotton	65	56.92
11	Sugarcane	195	193.69
12	Flowers/ Spices	75	82.50
13	Fodder, Sesamum and Pulses	100	20.26
	Total :	2040	1023.19

Productivity increase by Micro Irrigation Intervention

S.No	Name of the Crop	Normal yield per Ha. in Tons per Ha.	Yield due to MI Intervention in Tons per Ha.	Productivity increase per Ha. %
1	Oil Palm	18.00	30.00	67
2	Mango	15.00	25.00	67
3	Banana	42.50	55.00	29
4	Acid Lime	12.50	17.50	40
5	Cashew	0.80	1.00	25
6	Coconut (Copra recovery)	1.80	2.16	20
7	Papaya	75.00	100.00	33
8	Vegetables	18.00	35.00	94
9	Sugarcane	87.50	150.00	71

There is a considerable increase in productivity due to Micro Irrigation Intervention with the significant increase in the crops like Mango, Vegetables, Sugarcane, Oilpam etc, The double digit growth can be achieved with Micro Irrigation in the above crops.

Fisheries

ACTION PLAN FOR INCREASE THE PRODUCTION UNDER FISHERIES SECTOR DURING 2015-16 IN EAST GODAVARI

I. Marine Fisheries :

	Production (M.Tonns) Present	Projected	Intervention required
a) Marine Fish	82380 (2014-15)	87,500 (2015-16)	
b) Marine Prawn	15600	17,950	

Resources

1. Length of Coast line – 161 KMtrs
2. Mechanized Boats - 711 No's
3. Motorised Boats - 1794 No's
4. Country Crafts - 2576 No's

Total: 5081

1. Diversification of Fishing for untapped Tuna Fishing by long line fishing

No. of Units	Unit Cost	Total outlay	Subsidy	Loan/ Ben. Con	Expected	
					Production M. Tons	Value In Lakhs
300	4.00	1200.00	600.00	600.00	36000.00	36000.00

2. Motorization of Traditional Crafts

No. of Units	Unit Cost	Total outlay	Subsidy	Loan/ Ben. Con	Expected	
					Production M. Tons	Value In Lakhs
300	0.60	180.00	90.00	90.00	9450	4725.00

3. Strict implementation of Ban period from 15-04-2015 to 31-05-2015

40% i.e. 35,200 tonns can be expected

4. Supply of Ice boxes with 50% subsidy limited to Rs. 3000/- per Box

II. Inland Fisheries

	Production Present	Projected	
1. Inland Fish	30545	35150	
2. Inland Prawn	10778	18000	1. Stocking of Fish fingerlings under RKVY /NFDB Scheme in all MI Tanks and Reservoirs
			2. Stocking of fresh water prawn juveniles in selective Reservoirs/ M.I. Tanks

Resources	No.	T.E.W.S.A (Ha)
1. M.I. Tanks	206	1746.87
2. Reservoirs	18	4054.75
3. Godavari	1	10,000

III. Brackish water Fisheries

	Production (M.Tonns) Present	Projected
1. Tiger prawn	4500	4950
2. L. Vannamei	6000	9030
3. Crab ----	5000	
4. others	----	5000

1. Mechanisation in Aqua culture by supplying Aerators, Solar pumps to SF/ MF farmers

No. of Units	Unit Cost	Total outlay	Subsidy	Loan/ Ben. Con	Expected	
					Production M. Tons	Value In Lakhs
650	5.00	3250.00	1625.00	1625.00	650	2600.00

2. Promotion of Mud crab farming in 100 Ha

IV. Introduction of new species/ Techniques

1. Tilapia farming in 250 Ha
2. Seabass farming 75 Ha
3. Cage culture in Major Reservoirs i.e. Yeleru, Maddigadda, Bhupathipalem
4. Setting up of Fibre marts in Kakinada and Rajahmundry Municipal Corporations
5. Setting up of retail outlets with De-scaling, De-boning, packing machine and working shed.

Abstract (In terms of production 15.15%, Value=36.86)

Sl. No.	Item	Present 2014-15 (Tonns)	Projected (2015-16) (Tonns)	Value (lakhs)
1.	Marine Fish	82380	87500	43750
2.	Marine Prawn	15600	17950	34700
3.	Inland Fish	30545	35150	17575
4.	Inland prawn	10778	18000	36000
5.	Tiger prawn	4500	4950	9900
6.	L. Vannamei	6000	9030	18600
7	Crab	-----	**5000**	**25000**
8	Others	-----	5000	**5000**
	Total:	149803	**182580**	**190525**

THANK YOU

ACTION PLAN FOR 2015-16




ANIMAL HUSBANDRY

EAST GODAVARI DISTRICT

Revenue Divisions : 6

DIVISIONAL OFFICES OF AHD : 3

KAKINADA - RAJAHMUNDRY - AMALAPURAM

- *Total number of Mandals in the District* : 64
- *Total number of Villages* : 1411

LIVESTOCK RESOURCES

(19th livestock census)

Cattle : 2,71,671

Buffaloes : 6,23,647

Sheep
2,29,006

Goat
2,20,191

Poultry
1,38,13,701

Pigs
21,093

Others *40,041*

VETERINARY HEALTH INSTITUTIONS

- Veterinary Poly Clinic : 1
- Veterinary Hospitals : 15
- Veterinary Dispensaries : 152
- Rural Livestock Units : 80

TRAINING INSTITUTIONS

- State Animal Husbandry Training Centre : 1 (Mandapeta)
- Regional A. H. Training Centre : 1 (Kakinada)
- District A.H. Training Centre : 1 (Kakinada)

VETY. RESEARCH DIAGNOSTIC & BIOLOGICAL PRODUCTION INSTITUTIONS

- Veterinary Biological Research Institute 1 (Samalkota)
- Animal Disease Diagnostic Laboratory 1 (akinada)

INSTITUTIONS IN ANIMAL HUSBANDRY AND HEALTH SERVICES

- Veterinary Poly Clinic : 1
- Veterinary Hospitals : 15
- Veterinary Dispensaries : 152
- Rural Livestock Units : 80
- Gopalamitra centers : 235

PRODUCTION ESTIMATES FROM LIVESTOCK

S.NO	ITEM OF PRODUCTION	PRODUCTION DURING 2014-15
1	MILK	8.286 LAKH MTs
2	MEAT	43,970 MTs
3	EGGS	44,536.89 LAKH NOS.

SGDP AT CURRENT PRICES FROM AGRICULTURE SECTOR

S.NO	SECTOR	RS. IN CRORES	%TO THE SGDP
1	AGRICULTURE	75220	15.80
2	ANIMAL HUSBANDRY	33600	7.06
3	FISHERIES	17295	3.63
4	OTHERS	4904	1.03
	TOTAL AGRI	1,31,019	27.53
	SGDP	4,75,859	

GROWTH RATE IN SGDP AT CURRENT PRICES FROM AGRICULTURE SECTOR

S.NO	SECTOR	% GROTH RATE
1	AGRICULTURE	16.74
2	ANIMAL HUSBANDRY	7.14
3	FISHERIES	22.75
4	OTHERS	6.39
	TOTAL AGRI	14.44
	SGDP	13.46

EXPECTED PRODUCTION FROM LIVESTOCK IN 2015-16 IN EAST GODAVARI DISTRICT

S.NO	ITEM OF PRODUCTION	PRODUCTION DURING 2014-15	EXPECTED GROWTH RATE	EXPECTED PRODUCTION 2015-16
1	MILK	8.76 LAKH MTs		9.46 LAKH MTs
2	MEAT	44,574 MTs		45,254 MTs
3	EGGS	48,881 LAKH NOS.		42,229 LAKH NOS.

ACTION PLAN FOR 2015-16 TO REACH EXPECTED GROWTH

MILK SECTOR

- KSHEERASAGAR PROGRAMME
- HEIFERS COMING INTO MILK PRODUCTION
- INTRODUCTION OF MILCH ANIAMALS
- IMPROVING FODDER PRODUCTION
- SUPPLY OF MINERAL MIXTURE
- PREVENTIVE VACCINATIONS
- ORGANISATION OF HEALTH CAMPS
- AWARENESS BUILDING

KSHEERASAAGAR PROGRAM

❖Animals at 6th to 7th month pregnancy will be enrolled.

❖Concentrate feed will be supplied during the last trimester of pregnancy and during 1st trimester of calving

6500 animals are being introduced into the scheme and 1300 MTs of additional milk production is expected






Sunandini (Calf Feed Subsidy Program)

No. of calves Born in 2011-12	No. likely to come into Production for the first time
58,898	13,000 Expected production 19500 MTs


AREA BASED MINERAL MIXTURE SUPPLY

- ❖To sustain production
- ❖Maintain general health and improve fertility rate
- ❖Reduce dry period
- ❖Reduce inter calving period of the animals
- ❖Mineral mixture is supplied on 75% subsidy.

Fodder Development
(Area under Fodder Cultivation)

	FODDER PRODUCTION DURING 2014-15	FODDER PRODUCTION DURING 2014-15
1	17,000 ACRES	2,000 ACRES

Health and Fertility Camps

Health and fertility Camps organised In 2014-15	Health and fertility camps Proposed to be organised in 2015-16
300	500

HRD Trainings

TRAININGS
No. of farmers to be trained under various programmes : 5000

PRODUCTION ENHANCEMENT

ALL THE INITIATIVES LIKE

FODDER PRODUCTION,
PREVENTIVE VACCINATION,
DEWORMING,
MINERAL MIXTURE SUPPLY,
ORGANISATION OF HEALTH CAMPS,
TRAINING PROGRAMMES ARE EXPECTED TO
IMPROVE MILK PRODUCTION BY 10%

ACTION PLAN FOR 2015-16 TO REACH EXPECTED GROWTH

MEAT SECTOR

- SUPPLY OF MINI SHEP/GOAT UNITS
- INTRODUCTION OF RAMS OF IMPROVED BREEDS
- DEWORMING OF ALL SHEEP AND GOATS TWICE
- PREVENTIVE VACCINATIONS IN SHEEP & GOAT
- AWARENESS BUILDING
- BACKYARD POULTRY DEVELOPMENT

MINI SHEEP AND GOAT UNITS

- 5 sheep or goats are supplied
- 50% subsidy @ 15000/- to each unit
- 62units are sanctioned to the district
- Identification of beneficiaries is completed

BACKYARD POULTRY UNITS

- 45 four week old chicks are supplied in two spells

ISSUES IN THE DEPARTMENT

- **Large no of vacancies (35%).**
- **52 out of 149 veterinary assistant surgeon**
- **71 out of 115 veterinary assistant**
- **70 out of 189 posts Office subordinates -vacant**
- **Inadequate Awareness levels of farmers on scientific feeding and management**

FURTHER INTERVENTIONS NEEDED TO REACH EXPECTED GROWTH

MILK SECTOR

- SUPPLY OF CONC. FEED ON SUBSIDY TO ALL MILCH ANIMALS
- SUPPORT PRICE FOR MILK
- CREDIT FACILITY ON DRI
- PROVISION OF HOUSING (SUBSIDY ON ANIMAL SHEDS)
- ESTABLISHMENT OF FARM SCHOOLS
- INSURANCE FOR DAIRY FARMERS
- SUPPORT FOR FPOs
- MILK SUPPLY TO SCHOOL CHILDREN
- STRENGTHENING OF MILK COOPS.

FURTHER INTERVENTIONS NEEDED TO REACH EXPECTED GROWTH

MEAT SECTOR

- ALLOCATION OF LAND FOR GRAZING
- SUPPLY OF CONC. FEED ON SUBSIDY
- ORGANISATION AND REGULATION OF CATTLE AND SHEEP SHANDIES
- ALLOWING MALE BUFFALO CALVES FOR SLAUGHTER
- BACKYARD POULTRY SUPPORT IN A BIGGER SCALE
- EXPORT PROMOTION

FURTHER INTERVENTIONS NEEDED TO REACH EXPECTED GROWTH

EGG SECTOR

- AGRICULTURE STATUS TO POULTRY
- COLD STORAGE FACILITY
- EXPORT PROMOTION
- CREDIT FLOW.

Thank You

JOINT DIRECTOR
ANIMAL HUSBANDRY
KAKINADA

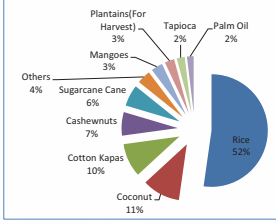
APPSM - East Godavari District

East Godavari Primary Sector Team

East Godavari Profile

- *District Profile (10818 km2)*
- *Agency, (3000 km2): Rainfed 80%*
- *Upland (Approx. 4000 km2); 50-50 RF and Irrigated*
- *Delta (Approx. 3500km2); Irrigated 90%*
- *Rainfall 1200 mm*

Major Crop Details in the District



APPSM - Progress

1. **Pilot site identification has been completed**
   a. Gangavaram – 7 villages (G.Area - 4902 ha; Cul.Area - 3034 ha)
   b. Yeleswaram – 9 villages (G.Area – 8968 ha; Cul.Area – 4652 ha)
   c. Tallarevu, Karapa and Kajuluru – 61 Villages (Inland Fisheries of 2160 ha)
2. **Collection of soil samples**
   a. Farmers meeting on soil sampling are in progress - (4(7) in Gangavaram and 3(9) in Yeleswaram completed)
   b. Farmers training on collection of soil samples - (1 (7) in Gangavaram mandal has been completed and crop exists in Yeleswaram mandal)
3. **Discussions on convergence of schemes with all departments have been completed**

Criteria Adopted for Site Selection

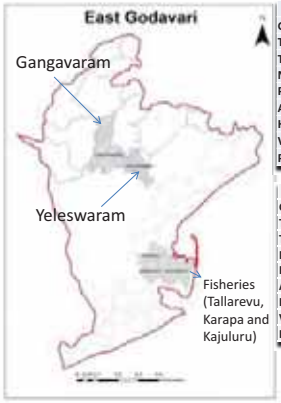
- Representativeness in terms of soils, landscape, rainfall, crops, and socio-economic conditions of district
- Accessibility for regular monitoring
- Farmers willingness to adopt
- Presence of suitable institutions
- Potential for impact

Process

Stakeholders' consultations *(Consultation with all line Departments)*

- District collector
- CPO
- JD's of all line departments
- Mandal level - all line departments staff
- Farmers

About the Pilot Site



Gangavaram Pilot Site Details	
Geo Area (Ha)	4902
Total Kharif Area (Ha)	3034
Total Rabi Area (Ha)	-
No Of HH	1331
Population	4901
Agriculture	670 (22%)
Horticulture	1874 (62%)
Vegetables	490 (16%)
Pulses	- -

Crop	Gangavaram Area in Ha	% Area
Cashewnut	1874	62
Tapiyoca	490	16
Cotton	400	13
Paddy	270	9
	3034	

Yeleswaram Pilot Site Details	
Geo Area (Ha)	8968
Total Kharif Area (Ha)	4652
Total Rabi Area (Ha)	2784
No Of HH	16156
Population	62942
Agriculture	3280 (71%)
Horticulture	1033 (22%)
Vegetables	236 (5%)
Pulses	101 (2%)

Crop	Yeleswaram Area in Ha	% Area
Paddy	1904	42
Sugar cane	1043	23
Banana	417	9
Cotton	293	6
Cashewnut	257	6
Palm oil	170	4
Mango	137	3
Tapiyoca	115	3
other	246	5
	4583	

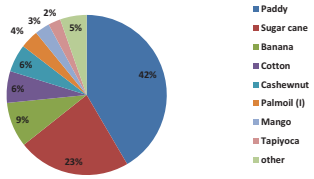
Rainfall and PET variations in the Pilot Sites

Element	Kharif	Rabi	Annual
PET (mm)	695	631	1711
Rainfall (mm)	916	128	1168

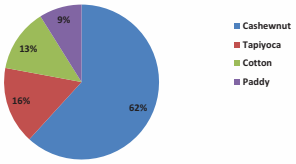
Element	Kharif	Rabi	Annual
PET (mm)	704	633	1728
Rainfall (mm)	907	93	1105

Details of Pilot sites

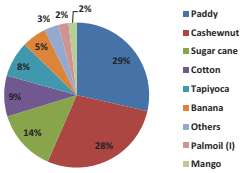
Major Crops in Yeleswaram Pilot Site Villages



Major Crops in Gangavaram Pilot Site Villages



Major crops in entire Pilot Site



ICRISAT International Crops Research Institute for the Semi-Arid Tropics

S No	Crop	Interventions	Possible Area (Ha)		Proposed Area (%)		Expected (%) Yield increase		% increase in prodcution	
			GGVM	YLSM	GGVM	YLSM	GGVM	YLSM	GGVM	YLSM
1	Paddy	Micro-nutrient Application	270	2728	60%	60%	10	10	14.6	14.6
2		Green Manure - Dahicha orsun hemp -75kgs/hect	270	2728	2%	2%	5	5		
3		Improved cultivars MTU 1075 and 1064 1061 RT bio 226 (Paddy)	270	2728	50%	50%	15	15		
4		Plantation methods - Direct -drum SNSRI Paddy	270	2728	5%	5%	10	10		
5		Farm Mechanisation - Custum hiring Centres - Combined Harvesters Driers - Power trillers - Rotovaters	270	2728	5%	5%	10	10		
6	Cotton	Micro-nutrient Application	400	293	60%	60%	10	10	12	12
7		Cotton-IPM	400	293	30%	30%	10	10		
8		Cotton-High density plantation	400	293	20%	20%	10	10		
9		Cotton-Inter cropping with Red gram	400	293	10%	10%	10	10		
10	Sugarcane	Micro-nutrient Application		2131		60%		10		9
11		Sugarcane- Bud chip and single chip method		2131		10%		10		
12		Micro Irrigation		2131		10%		10		
13		WIC		2131		10%		10		

S No	Crop	Intervention	Possible Area (Ha)		Proposed Area (%)		Expected (%) Yield increase		% increase in production	
14	Banana	Micro-nutrient Application		882		60%		10		11.0
15		Tissue cluture in Banana		882		10%		10		
16		IPM in Banana		882		20%		10		
17		WIC		882		10%		10		
18		Micro Irrigation		882		10%		10		
19	Cashewnut	Micro-nutrient Application	1874	257	60%	60%	10	10	11	11
20		Micro Irrigation	1874	257	5%	5%	10	10		
21		Rejuvenation	1874	257	30%	30%	15	15		
		Pruning and Training, Basin Preparation, Fertiliser Application, Gap filling, IPM and Grafting								
22	Tapioca	Micro-nutrient Application	490	115	60%	60%	10	10	10	10
23		CTCRI - Plant Materials (Trivendrum), YSR University	490	115	20%	20%	10	10		
24		BBF	490	115	20%	20%	10	10		
25		Capacity Building programs - Salem visit								
26	Brinjal	Micro-nutrient Application		72		60%		10		10.1
27		Micro Irrigation		72		10%		10		
28		IPM		72		10%		10		
29		mulching		72		2%		5		
30		BBF		72		20%		10		
31	Palmoil	Micro-nutrient Application		170		60%		10		7.5
32		Micro Irrigation		170		10%		10		
		Intercrop - COCOA - WIC		170		5%		10		

S No	Sector	Crop	2014-15			2015-16			Increase in Value			Increase in %		
			Area (Ha)	Prod' (tons)	Gross Value (Rs Crore)	Area (Ha)	Prod' (tons)	Gross Value (Rs Crore)	Area (Ha)	Prod' (tons)	Gross Value (Rs Crore)	Area (Ha)	Prod' (tons)	GVA
1	Agriculture	Paddy	2728	15168	1.9	2728	17005	2.2	0	1837	0.28	0.0	12.1	14.6
		Cotton	293	1026	0.4	293	1149	0.4	0	123	0.04	0.0	12.0	12.0
		Sugarcane	2131	159808	21.1	2131	166848	23.0	0	7040	1.90	0.0	4.4	9.0
2	Horticulture	Banana	882	22045	9.4	882	23191	10.4	0	1147	1.03	0.0	5.2	11.0
		Tapioca	115	1833	0.5	115	2017	0.5	0	183	0.05	0.0	10.0	10.0
		Brinjal	72	1449	0.8	72	1596	0.9	0	146	0.08	0.0	10.1	10.1
		Plam oil	170	2551	1.7	170	2742	1.8	0	191	0.12	0.0	7.5	7.5
3	Animal Husbandry													
	Backyard Poultry													
4	Fisheries													
	Inland													
	Total		6391	203879	36			39		10669	4			10.6

Thank You

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Major interventions

- Soil test-based nutrient management
- Improved cultivars
- Integrated pest management
- Organic matter building measures
- Landform management for in-situ moisture conservation and water management (including MI & scheduling)
- Expansion of horticulture crops
- Expansion of poly houses
- Fodder promotion
- Shifting to high value agriculture
- Etc..

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Discussions made

District Collector; CPO; Sub Collector – ITDA; JDA – Agriculture; PD-ATMA; PD-DWMA; JDA-Animal husbandry; JDA- Horticulture; DD-Fisheries; PHO-ITDA; PAO-ITDA; ADA-Addateegala; ADA-Yeleswaram; AO-Addateegala; AO-Yeleswaram; HO-Addateegala, etc.

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Process

1. Met District Collector and CPO : discussed about pilot site selections
2. As suggested by DC we met all districts heads of Primary sectors as shown in pics
3. Visited Mandal offices and collected village level data and analysed and also checked the criteria list for selection
4. Contacted back all heads of primary sectors for zeroing the mandals (Addateegala and Yeleswaram mandals for agriculture, horticulture, animal husbandry and watershed development, and Tallarevu, Karapa and Kazuluru for fisheries development)
5. Then meet DC and CPO for finalising the proposed mandals and to get approval from DC
6. Memo has been sent to all line departments for sharing their 2015-16 working plans in proposed mandals

Swarnandhra Vision
A Mission on Primary Sector

Guntur District Team


ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Guntur District Profile

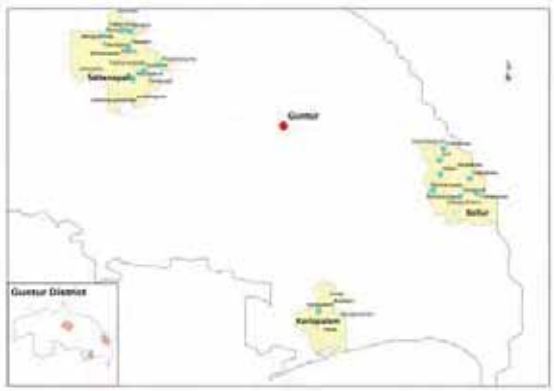
Major Soils	area ('000 ha)	% of total
Black Cotton Soils	491	72
Red Soils	116	17
Coastal Sandy Soils	61	9
Alluvial Soils	14	2

Rainfall	Rainfall (mm)
SW monsoon (June-Sep)	545
NE monsoon (Oct-Dec)	251
Winter (Jan-Feb)	14
Summer (March-May)	71
Annual	881

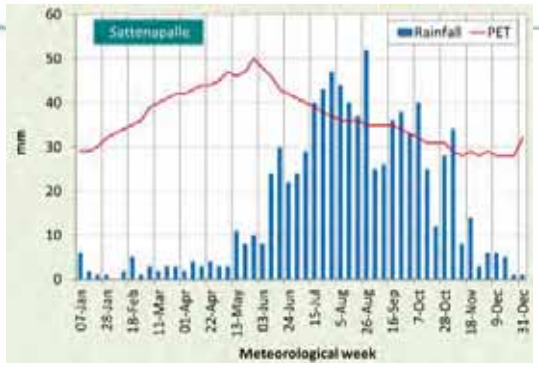
Guntur District Area Under Different Crops (%)

Crop	Cropped Area (Ha)	% of Crop	Yield
			kg ha^{-1}
Rice	329465	38	3483
Maize	80352	9.3	8021
Cotton	170158	19.6	1083
Chillies	64129	3.0	5000
Groundnut	4746	0.5	1969
Vegetables	14354	1.7	
Fresh Fruits	12936	1.5	
Total	676140		

Selected villages of Guntur district pilot site

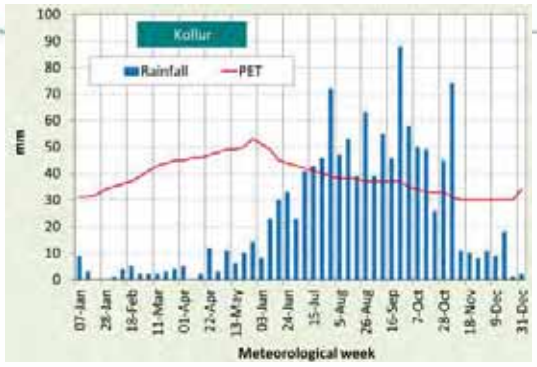


Guntur district, Sattenapalli mandal



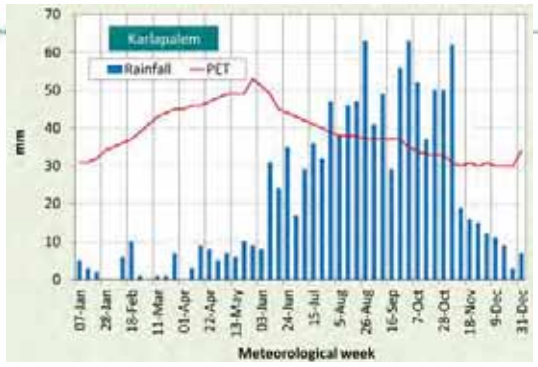
Element	harif	Rabi	Annual
T		1	1 01
a all	5	10	858

Guntur district, Kollur mandal



Element	harif	Rabi	Annual
T	810	8	01
a all		18	1 1

Guntur district, Karlapalem mandal



Element	harif	Rabi	Annual
T	810	0	018
a all	8	1 0	11

Constraints Identified Across villages Based on Stakeholders Consultations

Agriculture

- Lack of awareness on soil health
- Non application of oraganic manures
- Excess use of N P K fertilizers
- Rodent damage
- Labour shortage
- Lack of mechanisation
- Fluctuations in market prices

Horticulture

- Lack of knowledge of improved management practices for vegetable cultivation
- Lack of improved vegetable crop varieties
- Needs regular capacity building program
- Banana susceptible to lodging due to more plant height
- Required tissue culture seedlings in Banana

Guntur - District Pilot area Agriculture and Horticulture (Kharif + Rabi), Production and GVA for 2014-15 (MSP 2014-15) Targets for 2015-16 (Current prices)

Crop	2014-15 Area ha	Production (Tonnes)	GVA (Rs. Crores)	Target 2015-16 Area ha	Production (Tonnes)	GVA (Rs. Crores)	% increase GVA
Paddy	5321	29574	41	5321	33517	47	13
Maize	3752	25948	34	2814	23631	31	-9
Greengram	72	71	0	830	1230	6	1638
Sorghum	606	3743	6	606	4491	7	20
Cotton	2908	7182	29	2908	10055	41	40
Banana	1315	25984	31	1315	32481	39	25
Chilli	2133	11590	81	2133	15804	111	36
Turmeric	597	2950	18	597	3245	19	10
Vegetables	123	3038	0	123	3950	0	30
Yam	684	22815	18	684	26618	21	17
Betelleaves (pantalu) Lakh No	201	149	7	201	198	10	33

Guntur - District Pilot area Livestock and Fisheries Production and GVA for 2014-15 Targets for 2015-16 (Current prices)

Particulars	2014-15 Production Tonnes/year	GVA (Rs. Crores)	Target 2015-16 Production Tonnes/year	GVA (Rs. Crores)	% increase GVA
Cattle (No)	1110				
Buffalo (No)	12463				
Sheep (No)	6180				
Goat (No)	828				
Milk total	9656	21	12874	29	33
Meat total	131	1	150	2	15
Egg (Lakh No) total	69	1	76	2	10

Particulars	2014-15 Area ha	Production ton	GVA (Rs. Crores)	Target in 2015-16 Area ha	Production ton	GVA (Rs. Crores)	% increase GVA
White leg Shrimp	200	1200	48	200	2400	96	100

Guntur- Pilot site specific growth engines with area (kharif + rabi),production and GVA

Sl No	Sector	Growth Engines	2014-15 Area ha	Production (Tonnes)	GVA (Rs. Crores)	Target 2015-16 Area ha	Production (Tonnes)	GVA (Rs. Crores)	% increase GVA
1	Agriculture	a	53 1	5	1	53 1	3351		13
		a	3 5	5 8	33.	81	3 31	30.	
3		a		1	0.33	830	1 30	5.	1 38
		o	0	3 3	5. 3	0	1	.8	0
5		otto	08	18	.0	08	10055	0.	0
		Agriculture			110.53			131.13	19
	Horticulture	a a a	1315	5 8	31.18	1315	3 81	38. 8	5
		ll	133	115 0	81.13	133	1580	110. 3	3
8		T	5	50	1 . 0	5	3 5	1 .	10
		ta l	1 3	3038	0.1	1 3	3 50	0.1	30
10		a	8	815	18. 5	8	18	1.	1
11		t ll a	01	1	.	01	1 8	.	33
		a a tal							
		Horticulture			155.82			200.45	29
1	Livestock	l		5	1. 1		1 8	8. 1	
13		at		131	1.		150	1. 3	1
1		a o			1. 0			1.5	10
		Livestock			24.29			31.80	31
15	Fishing	t l	00	1 00	8.00	00	00	.00	100
1		a a o							
		Fishing			48.00			96.00	100
		Grand total			338.40			458.11	35

Agriculture

Sl.No.	Technological interventions
	Paddy
1	Creating awareness on soil health through soil testing
2	Awareness on use of FYM, green manure and organic inputs
3	Supply of farm machinery,training on ICM practices
4	Micronutrient application
5	Training and supply of rodenticide on whole village approach
	Maize
1	Micronutrient application
2	Zero tillage
	Cotton
1	High density planting
2	Micronutrient application
3	Awareness on advantage of growing refugee crop.
4	Encouraging for inter crop of pigeonpea
5	Encouraging to use Biofertilizers like Azetobactor,Azopirillium,P.S.B

Agriculture

Sl.No.	Technological interventions
	Greengram
1	Creating awareness on soil health through soil testing
2	Supply of decease resistant cultivars
3	Micronutrient application
	Chilli
1	Micronutrient application and creating awareness on ICM
2	To discourage excess use of N P K fertilizers
3	Encouraging to use Biofertilizers like Azetobactor, Azopirillium, P.S.B
4	Creating awareness for not to dry on the soil in field and to encourage to use tarpaulins
	Vegetables
1	Providing good quality seed
2	Encouraging for drip irrigation
3	Micronutrient application
	Encourage to grow high value vegetables in shade nets

Livestock

Sl.No.	Interventions
	Milk
1	Increase the number of better yielding cattle
2	Supply of good quality feed with better digestibility
3	Better feeding practices
	Meat
1	Providing more Ramlamb units
2	Sheep and Goat de worming
4	Rejuvenation of garzing lands
	Egg
1	Encouraging back yard poultry
2	Providing subsidy on power to poultry farms

Fisheries

Sl.No.	Interventions
	White leg shrimp
1	Monitoring the pilot project site with active participation officials from department and MPEDA
2	To adopt cluster approach for better resource management for optimum utilization
3	Strict enforcement on the stake holders to purchase seed from CAA approved hatcheries only
4	To conduct awareness camps frequently to motivate the aqua farmers on the adoption of good management practices. Also to discuss constrains,problems and prospects

Guntur district, Sattenapalli mandal Kattamur village soil analysis data

% Deficient Fields

District	Mandal	Village	OC	Av P	Av K	Av Ca	Av Mg	Av S	Av Zn	Av B
			%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Guntur	Sattenapalli	Kattamuru	60	10	0	0	0	17	63	7

Mean Values

District	Mandal	Village	pH	EC	OC	Av P	Av K	Av Ca	Av Mg	Av S	Av Zn	Av B	Av Fe	Av Cu	Av Mn
				dS/m	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Guntur	Sattenapalli	Kattamuru	8.22	0.41	0.51	15.22	208	5036	411	26.74	0.85	0.96	4.22	1.93	6.46

EC=Electrical Conductivity; OC=Organic Carbon; AV=Available; P=Phosphorous;

K=Potassium; Ca=Calcium; Mg=Magnesium;

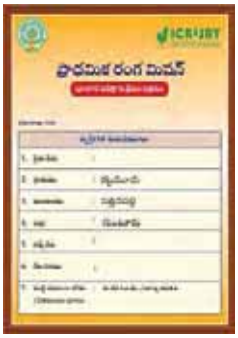
S=Sulphur; Zn=Zinc; B=Boron; Fe=Iron; Cu=Copper; Mn=Manganese

Soil Test based Fertilizer Recommendations for Kattamur village (Kg ac^{-1})

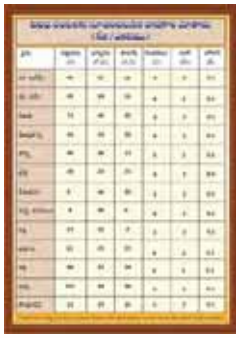
Crop	Urea	Di Ammonium Phosphate	Murate-Potash	Gypsum	Zinc sulfate	Borax
Maize (kharif)	79	22	13	3	10	0
Maize (Rabi)	95	26	17	3	10	0
Paddy (Kharif)	70	24	13	3	10	0
Paddy (Rabi)	95	26	13	3	10	0
Sorghum (Rainfed)	59	18	10	3	10	0
Sorghum (Irrigated)	69	26	13	3	10	0
Cotton (Hybrids)	95	26	20	3	10	0
Sesame(Kharif)	25	26	13	3	10	0
Sesame(Rabi)	43	26	13	3	10	0
Groundnut (Rainfed)	11	18	17	3	10	0
Groundnut (Irrigated)	19	18	17	3	10	0
Pigeonpea (Kharif)	9	22	0	3	10	0
Pigeonpea (Rabi)	27	22	0	3	10	0
Greengram,Blackgram,Chickpea	9	22	0	3	10	0
Chillis (Rainfed)	46	18	17	3	10	0
Chillis (Irrigated)	254	26	40	3	10	0
Ginger	40	11	17	3	10	0
Onion	162	35	20	3	10	0
Potato	40	11	12	3	10	0
Carrot	37	18	17	3	10	0
Yam	210	26	84	3	10	0
Tomato	122	26	20	3	10	0
Brinjal	78	26	20	3	10	0

Soil data of Kattamur village (wall writing)

Soil Health card for Kattamur (Village Mean data)



Soil Health card for Kattamur (Village Mean data)



Acknowledgement

I sincerely acknowledge

All the district level officials of the line departments,

Kollur, Sattenapalli and Karlapalem mandal level officials of line departments

for providing necessary support in getting the required data of the pilot site and for the help and co-operation in preparation of action plan of the pilot site.

Thank you

ICRISAT is a member of the CGIAR Consortium

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Guntur - District Pilot area (Kharif + Rabi), production and GVA for 2014-15 (MSP 2014-15)
Targets for 2015-16 (Current prices)

Mandal	Village	Crop	2014-15					Target 2015-16					% increase
			Area	Productivity	Production	MRP	GVA	Area	Productivity	Production	MRP	GVA	GVA
			ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	
		Kharif											
Kollur	Chilumuru	Paddy	148	5558	821	14000	1.15	148	6299	931	14000	1.30	13
Kollur	Donepudi	Paddy	540	5558	3004	14000	4.21	540	6299	3404	14000	4.77	13
Kollur	Gajullanka	Paddy	0	5558	0	14000	0.00	0	6299	0	14000	0.00	
Kollur	Ipuru	Paddy	247	5558	1375	14000	1.92	247	6299	1558	14000	2.18	13
Kollur	Kolluru	Paddy	1358	5558	7549	14000	10.57	1358	6299	8555	14000	11.98	13
Kollur	Potharlanka	Paddy	0	5558	0	14000	0.00	0	6299	0	14000	0.00	
Kollur	Ravikampadu	Paddy	1151	5558	6397	14000	8.96	1151	6299	7250	14000	10.15	13
Sattenapalli	Bhatluru	Paddy	85	5558	473	14000	0.66	85	6299	536	14000	0.75	13
Sattenapalli	Gudipudi	Paddy	506	5558	2813	14000	3.94	506	6299	3188	14000	4.46	13
Sattenapalli	Kattamuru	Paddy	183	5558	1015	14000	1.42	183	6299	1150	14000	1.61	13
Sattenapalli	Nandigama	Paddy	640	5558	3555	14000	4.98	640	6299	4029	14000	5.64	13
Sattenapalli	Panidem	Paddy	401	5558	2228	14000	3.12	401	6299	2525	14000	3.53	13
Sattenapalli	Pedamakkena	Paddy	34	5558	189	14000	0.26	34	6299	214	14000	0.30	13
Sattenapalli	Rentapalla	Paddy	28	5558	158	14000	0.22	28	6299	179	14000	0.25	13
		Paddy total	5321		29574		41	5321		33517		47	13

Mandal	Village	Crop	2014-15					Target 2015-16					% increase
		Rabi	Area	Productivity	Production	MRP	GVA	Area	Productivity	Production	MRP	GVA	GVA
			ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	
Kollur	Chilumuru	Maize	75	6916	518	13100	0.68	56	8398	472	13100	0.62	-9
Kollur	Donepudi	Maize	397	6916	2744	13100	3.59	298	8398	2499	13100	3.27	-9
Kollur	Gajullanka	Maize	351	6916	2428	13100	3.18	263	8398	2211	13100	2.90	-9
Kollur	Ipuru	Maize	163	6916	1128	13100	1.48	122	8398	1028	13100	1.35	-9
Kollur	Kolluru	Maize	1270	6916	8781	13100	11.50	952	8398	7997	13100	10.48	-9
Kollur	Potharlanka	Maize	366	6916	2534	13100	3.32	275	8398	2308	13100	3.02	-9
Kollur	Ravikampadu	Maize	1130	6916	7815	13100	10.24	847	8398	7117	13100	9.32	-9
		Maize total	3752		25948		33.99	2814		23631		30.96	-9
Kollur	Chilumuru	Greengram	2	988	2	46000	0.01	21	1482	31	46000	0.14	1438
Kollur	Donepudi	Greengram	32	988	32	46000	0.15	132	1482	195	46000	0.90	509
Kollur	Gajullanka	Greengram	0	988	0	46000	0.00		1482	0	46000	0.00	
Kollur	Ipuru	Greengram	3	988	3	46000	0.01	44	1482	65	46000	0.30	1939
Kollur	Kolluru	Greengram	21	988	21	46000	0.10	338	1482	502	46000	2.31	2312
Kollur	Potharlanka	Greengram	0	988	0	46000	0.00		1482	0	46000	0.00	
Kollur	Ravikampadu	Greengram	13	988	13	46000	0.06	295	1482	438	46000	2.01	3321
		Greengram total	72		71		0.33	830		1230		5.66	1638

Mandal	Village	Crop	2014-15					Target 2015-16					% increase
		Rabi	Area	Productivity	Production	MRP	GVA	Area	Productivity	Production	MRP	GVA	GVA
			ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	
Kollur	Chilumuru	Sorghum	119	6175	738	15300	1.13	119	7410	885	15300	1.35	20
Kollur	Donepudi	Sorghum	115	6175	713	15300	1.09	115	7410	855	15300	1.31	20
Kollur	Gajullanka	Sorghum	0	6175	0	15300	0.00	0	7410	0	15300	0.00	
Kollur	Ipuru	Sorghum	171	6175	1055	15300	1.61	171	7410	1266	15300	1.94	20
Kollur	Kolluru	Sorghum	87	6175	538	15300	0.82	87	7410	645	15300	0.99	20
Kollur	Potharlanka	Sorghum	0	6175	0	15300	0.00	0	7410	0	15300	0.00	
Kollur	Ravikampadu	Sorghum	113	6175	700	15300	1.07	113	7410	840	15300	1.29	20
		Sorghum total	606		3743		5.73	606		4491		6.87	20
		Kharif											
Sattenapalli	Bhatluru	Cotton	306	2470	755	40500	3.06	306	3458	1057	40500	4.28	40
Sattenapalli	Gudipudi	Cotton	532	2470	1313	40500	5.32	532	3458	1838	40500	7.44	40
Sattenapalli	Kattamuru	Cotton	328	2470	810	40500	3.28	328	3458	1134	40500	4.59	40
Sattenapalli	Nandigama	Cotton	409	2470	1010	40500	4.09	409	3458	1414	40500	5.73	40
Sattenapalli	Panidem	Cotton	796	2470	1965	40500	7.96	796	3458	2751	40500	11.14	40
Sattenapalli	Pedamakkena	Cotton	422	2470	1042	40500	4.22	422	3458	1459	40500	5.91	40
Sattenapalli	Rentapalla	Cotton	116	2470	287	40500	1.16	116	3458	402	40500	1.63	40
		Cotton total	2908		7182		29.09	2908		10055		40.72	40

Mandal	Village	Crop	2014-15					Target 2015-16					% increase
			Area	Productivity	Production	MRP	GVA	Area	Productivity	Production	MRP	GVA	GVA
			ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	
Kollur	Chilumuru	Banana	73	19760	1442	12000	1.73	73	24700	1803	12000	2.16	25
Kollur	Donepudi	Banana	60	19760	1186	12000	1.42	60	24700	1482	12000	1.78	25
Kollur	Gajullanka	Banana	313	19760	6185	12000	7.42	313	24700	7731	12000	9.28	25
Kollur	Ipuru	Banana	123	19760	2430	12000	2.92	123	24700	3038	12000	3.65	25
Kollur	Kolluru	Banana	37	19760	731	12000	0.88	37	24700	914	12000	1.10	25
Kollur	Potharlanka	Banana	709	19760	14010	12000	16.81	709	24700	17512	12000	21.01	25
		Banana total	1315		25984		31.18	1315		32481		38.98	25
Sattenapalli	Bhatluru	Chilli	294	5434	1595	70000	11.17	294	7410	2175	70000	15.23	36
Sattenapalli	Gudipudi	Chilli	421	5434	2286	70000	16.00	421	7410	3117	70000	21.82	36
Sattenapalli	Kattamuru	Chilli	353	5434	1918	70000	13.43	353	7410	2616	70000	18.31	36
Sattenapalli	Nandigama	Chilli	263	5434	1430	70000	10.01	263	7410	1950	70000	13.65	36
Sattenapalli	Panidem	Chilli	443	5434	2409	70000	16.86	443	7410	3285	70000	23.00	36
Sattenapalli	Pedamakkena	Chilli	286	5434	1555	70000	10.89	286	7410	2121	70000	14.85	36
Sattenapalli	Rentapalla	Chilli	73	5434	396	70000	2.77	73	7410	540	70000	3.78	36
		Chilli total	2133		11590		81.13	2133		15804		110.63	36

Mandal	Village	Crop	2014-15					Target 2015-16					% increase
			Area	Productivity	Production	MRP	GVA	Area	Productivity	Production	MRP	GVA	GVA
			ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	
Kollur	Chilumuru	Turmeric	37	4940	184	60000	1.10	37	5434	202	60000	1.21	10
Kollur	Donepudi	Turmeric	23	4940	116	60000	0.70	23	5434	128	60000	0.77	10
Kollur	Gajullanka	Turmeric	101	4940	500	60000	3.00	101	5434	550	60000	3.30	10
Kollur	Ipuru	Turmeric	44	4940	216	60000	1.30	44	5434	238	60000	1.43	10
Kollur	Kolluru	Turmeric	17	4940	86	60000	0.52	17	5434	95	60000	0.57	10
Kollur	Potharlanka	Turmeric	287	4940	1420	60000	8.52	287	5434	1562	60000	9.37	10
Sattenapalli	Bhatluru	Turmeric	17	4940	84	60000	0.50	17	5434	92	60000	0.55	10
Sattenapalli	Gudipudi	Turmeric	10	4940	50	60000	0.30	10	5434	55	60000	0.33	10
Sattenapalli	Kattamuru	Turmeric	10	4940	50	60000	0.30	10	5434	55	60000	0.33	10
Sattenapalli	Nandigama	Turmeric	0	4940	0	60000	0.00	0	5434	0	60000	0.00	
Sattenapalli	Panidem	Turmeric	49	4940	240	60000	1.44	49	5434	264	60000	1.58	10
Sattenapalli	Pedamakkena	Turmeric	0	4940	0	60000	0.00	0	5434	0	60000	0.00	
Sattenapalli	Rentapalla	Turmeric	1	4940	4	60000	0.02	1	5434	4	60000	0.03	10
		Turmeric total	597		2950		17.70	597		3245		19.47	10

Mandal	Village	Crop	2014-15					Target 2015-16					% increase
			Area	Productivity	Production	MRP	GVA	Area	Productivity	Production	MRP	GVA	GVA
			ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	
Kollur	Chilumuru	Vegetables	9	24700	222	400	0.01	9	32110	289	400	0.01	30
Kollur	Donepudi	Vegetables	10	24700	247	400	0.01	10	32110	321	400	0.01	30
Kollur	Gajullanka	Vegetables	31	24700	766	400	0.03	31	32110	995	400	0.04	30
Kollur	Ipuru	Vegetables	10	24700	247	400	0.01	10	32110	321	400	0.01	30
Kollur	Kolluru	Vegetables	9	24700	222	400	0.01	9	32110	289	400	0.01	30
Kollur	Potharlanka	Vegetables	54	24700	1334	400	0.05	54	32110	1734	400	0.07	30
		Vegetables total	123		3038		0.12	123		3950		0.16	30
Kollur	Chilumuru	Yam	64	33345	2133	8000	1.71	64	38903	2489	8000	1.99	17
Kollur	Donepudi	Yam	40	33345	1350	8000	1.08	40	38903	1575	8000	1.26	17
Kollur	Gajullanka	Yam	214	33345	7128	8000	5.70	214	38903	8316	8000	6.65	17
Kollur	Ipuru	Yam	109	33345	3632	8000	2.91	109	38903	4237	8000	3.39	17
Kollur	Kolluru	Yam	8	33345	270	8000	0.22	8	38903	315	8000	0.25	17
Kollur	Potharlanka	Yam	249	33345	8303	8000	6.64	249	38903	9686	8000	7.75	17
		Yam total	684		22815		18.25	684		26618		21.29	17

Mandal	Village	Crop	2014-15					Target 2015-16					% increase
			Area	Productivity	Production	MRP	GVA	Area	Productivity	Production	MRP	GVA	GVA
			ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	ha	kg/ha	(Tonnes)	Rs/ton	(Rs. Crores)	
Kollur	Donepudi	Betelleaves (pantalu)	2	74100	120000	5	0.06	2	98800	160000	5	0.08	33
Kollur	Gajullanka	Betelleaves (pantalu)	0	74100	0	5	0.00	0	98800	0	5	0.00	
Kollur	Ipuru	Betelleaves (pantalu)	49	74100	3660000	5	1.83	49	98800	4880000	5	2.44	33
Kollur	Kolluru	Betelleaves (pantalu)	0	74100	0	5	0.00	0	98800	0	5	0.00	
Kollur	Potharlanka	Betelleaves (pantalu)	138	74100	10200000	5	5.10	138	98800	13600000	5	6.80	33
Kollur	Chilumuru	Betelleaves (pantalu)	12	74100	900000	5	0.45	12	98800	1200000	5	0.60	33
		Betelleaves (pantalu) total	201		14880000		7.44	201		19840000		9.92	33

Mandal	Village	Particulars	2014-15			Target 2015-16			% increase
			Production	MRP	GVA	Production	MRP	GVA	GVA
			Tonnes/year	Rs/Ton	(Rs. Crores)	Tonnes/year	Rs/Ton	(Rs. Crores)	
Kollur	Chilumuru	Milk	270	22000	0.595	349	22000	0.768	29
Kollur	Donepudi	Milk	527	22000	1.159	680	22000	1.496	29
Kollur	Gajullanka	Milk	439	22000	0.966	567	22000	1.247	29
Kollur	Ipuru	Milk	673	22000	1.481	869	22000	1.912	29
Kollur	Kolluru	Milk	1727	22000	3.799	2229	22000	4.904	29
Kollur	Potharlanka	Milk	310	22000	0.682	400	22000	0.880	29
Kollur	Ravikampadu	Milk	305	22000	0.672	394	22000	0.867	29
Sattenapalli	Bhatluru	Milk	411	22000	0.903	530	22000	1.166	29
Sattenapalli	Gudipudi	Milk	1277	22000	2.809	1648	22000	3.626	29
Sattenapalli	Kattamuru	Milk	741	22000	1.629	956	22000	2.103	29
Sattenapalli	Nandigama	Milk	1079	22000	2.374	1393	22000	3.065	29
Sattenapalli	Panidem	Milk	836	22000	1.839	1079	22000	2.374	29
Sattenapalli	Pedamakkena	Milk	491	22000	1.081	634	22000	1.395	29
Sattenapalli	Rentapalla	Milk	569	22000	1.253	735	22000	1.617	29
		Milk total	9656		21.243	12463		27.419	29

Mandal	Village	Particulars	2014-15			Target 2015-16			% increase
			Production	MRP	GVA	Production	MRP	GVA	GVA
			Tonnes/year	Rs/Ton	(Rs. Crores)	Tonnes/year	Rs/Ton	(Rs. Crores)	
Kollur	Chilumuru	Meat	0.377	109000	0.004	0.422	109000	0.005	12
Kollur	Donepudi	Meat	1.792	109000	0.020	2.007	109000	0.022	12
Kollur	Gajullanka	Meat	1.386	109000	0.015	1.552	109000	0.017	12
Kollur	Ipuru	Meat	0.636	109000	0.007	0.712	109000	0.008	12
Kollur	Kolluru	Meat	31.291	109000	0.341	35.046	109000	0.382	12
Kollur	Potharlanka	Meat	1.459	109000	0.016	1.634	109000	0.018	12
Kollur	Ravikampadu	Meat	0.486	109000	0.005	0.544	109000	0.006	12
Sattenapalli	Bhatluru	Meat	7.638	109000	0.083	8.555	109000	0.093	12
Sattenapalli	Gudipudi	Meat	14.226	109000	0.155	15.933	109000	0.174	12
Sattenapalli	Kattamuru	Meat	11.22	109000	0.122	12.566	109000	0.137	12
Sattenapalli	Nandigama	Meat	20.688	109000	0.225	23.171	109000	0.253	12
Sattenapalli	Panidem	Meat	16.6	109000	0.181	18.592	109000	0.203	12
Sattenapalli	Pedamakkena	Meat	10.8	109000	0.118	12.096	109000	0.132	12
Sattenapalli	Rentapalla	Meat	12.069	109000	0.132	13.517	109000	0.147	12
		Meat total	131		1.424	146		1.595	12

Mandal	Village	Particulars		2014-15		Target 2015-16			% increase
			Production	MRP	GVA	Production	MRP	GVA	GVA
			Tonnes/year	Rs/ton	(Rs. Crores)	Tonnes/year	Rs/ton	(Rs. Crores)	
Kollur	Chilumuru	Egg (Lakh No)	0.111	203397	0.002	0.122	203397	0.002	10
Kollur	Donepudi	Egg (Lakh No)	0.137	203397	0.003	0.151	203397	0.003	10
Kollur	Gajullanka	Egg (Lakh No)	0.082	203397	0.002	0.090	203397	0.002	10
Kollur	Ipuru	Egg (Lakh No)	0.031	203397	0.001	0.034	203397	0.001	10
Kollur	Kolluru	Egg (Lakh No)	67.542	203397	1.374	74.296	203397	1.511	10
Kollur	Potharlanka	Egg (Lakh No)	0.111	203397	0.002	0.122	203397	0.002	10
Kollur	Ravikampadu	Egg (Lakh No)	0.090	203397	0.002	0.099	203397	0.002	10
Sattenapalli	Bhatluru	Egg (Lakh No)	0.117	203397	0.002	0.129	203397	0.003	10
Sattenapalli	Gudipudi	Egg (Lakh No)	0.078	203397	0.002	0.085	203397	0.002	10
Sattenapalli	Kattamuru	Egg (Lakh No)	0.048	203397	0.001	0.053	203397	0.001	10
Sattenapalli	Nandigama	Egg (Lakh No)	0.221	203397	0.004	0.243	203397	0.005	10
Sattenapalli	Panidem	Egg (Lakh No)	0.266	203397	0.005	0.292	203397	0.006	10
Sattenapalli	Pedamakkena	Egg (Lakh No)	0.086	203397	0.002	0.095	203397	0.002	10
Sattenapalli	Rentapalla	Egg (Lakh No)	0.100	203397	0.002	0.110	203397	0.002	10
		Egg (Lakh No) total	69		1.404	76		1.544	10

Mandal	Village	Particulars	2014-15					Expected improvement in 2015-16					% increase
			Area	Productivity	Production	MRP	GVA	Area	Productivity	Production	MRP	GVA	GVA
			ha	ton	ton	ton	(Rs. Crores)	ha	kg/ha	Quintals	Rs/quintal	(Rs. Crores)	
Karlapalem	Tummalapalli	White leg Shrimp	100	6	600	400000	24	100	12	1200	400000	48	100
Karlapalem	Peda Puluguvari Palem	White leg shrimp	100	6	600	400000	24	100	12	1200	400000	48	100
		(L.Vannamei)											
		White leg Shrimp total	200		1200		48	200		2400		96	100
Tullur	Venkatapalem	Cage farming of fish		First of its kind in AP By Government				2					
		in river											

Double Digit Growth
Milk Production – Guntur district

PRESENT STATUS :

l o to a T	o t l o to a T		l o
01 15	015 1	t o t at	
10.39	11.60	7.6%	2841

ouble igit Growth
Meat Production – Guntur district

PRESENT STATUS :

Meat (Thousand MTs)	Projected Meat Production (in Thousand MTs)		G P (In Crores)
01 15	015 1	t o t at	
42257	48000	13.5%	793

ouble igit Growth
Eggs Production – Guntur district

PRESENT STATUS :

Eggs (in Lakh Nos)	Projected Eggs Production (in Lakh Nos)		G P (In Crores)
01 15	015 1	t o t at	
11413	12300	7.7 %	273

GUNTUR DISTRICT

Area under Horticulture Crops in Guntur District

Crop	Potential Mandals
Chillies	All Mandals except 15 coastal mandals in the district.
Banana	Kolluru, Thulluru, Thadepalli, Bhattiprolu, Kollipara, Tenali, Mangalagiri and Duggirala.
Turmeric	Duggirala, Bhattiprolu, Kolluru, Kollipara, Mangalagiri, Thulluru and Muppalla
Acidlime	Thulluru, Tsunduru, Duggirala, Mangalagiri, Phirangipuram and Bellamkonda
Sweet Orange	Bollapalli, Durgi, Nakarakal, Macharla, Velduthy and Vinukonda
Sapota	Duggirala, Chebrolu and Nagaram.
Brinjall	Chebrolu,Bapatla and Thadepalli.
Tomato	Chebrolu,Narasaraopet and Bellamkonda
Bhendi	Mangalagiri, Tsunduru, Thadepalli, Chebrolu, Narasaraopet and Dachepalli
Onion	Thadepalli, Mangalagiri, Tadikonda, Narasaraopet and Thulluru
Little gourd	Chebrolu, Pedakakani and Mangalagiri.
Betelvine	Ponnuru,Kolluru and Kollipara
Amla	Vinukonda and Bollapalli
Jasmine	Bapatla, Mangalagiri, Yadlapadu and Narasaraopet.
Marigold	Phirangipuram, Thadepalli, Narasaraopet and Mangalagiri
Crossandra	Mangalagiri,Narasaraopet, Yadlapadu and Bapatla.

ANNE URE - I

PRIMARY SECTOR MISSION-2015-16

istrict Profile

Name of the istrict: GUNTUR

Major Horticulture crops Grown in the istrict	Area(Ha) up to (31.3.2015)	Production (MTs)	Productivity (MT/Ha)	Average Market (Price based od 2014-15 Fig. in year) Rs/Ton	Total Value.(Rs. In Lakhs) (3*5)
1		3		5	
I.Short term Crops					
1. Banana(Local)	5600	280000	50	10000	28000.00
2.T.C. Banana	150	11550	77	18000	2079.00
3. Papaya	511	38325	75	6000	2299.50
4. Tomato	581	34860	60	12000	4183.20
5.Onion	55	1375	25	20000	275.00
6. Red Chillies	61544	307720	5	6800	20924.96
7.Green Chillies	455	9100	20	9000	819.00
8.Potato					
9.Turmeric	5604	33624	6	70000	23536.80
10.Garlic					
11. inger					
12. Pine Aplle					
13.Water Melon	47	1762.5	37.5	6000	105.75
14.Musk Melon					
15.Veg. Crops in the istrict	10731	289737	27	12000	34768.44
16.Flower Crops in the istict	820	123	0.15	25000	30.75
17.Other if any (specify)					
Sub-Total	86098	1008177	382.65	256000	305347.04

Major Horticulture crops Grown in the istrict	Area(Ha) up to (31.3.2015)	Production (MTs)	Productivity (MT/Ha)	Average Market (Price based od 2014-15 Fig. in year) Rs/Ton	Total Value.(Rs. In Lakhs) (3*5)
1	2	3	4	5	6
II.Long term Crops					
1.Mango	1238	11142	9	18000	2005.56
2.Cashew	166	33.2	0.2	180000	59.76
3.Sweet Orange	2462	92325	37.5	15000	13848.75
4.Acid Lime	2454	36810	15	30000	11043.00
5.Pomegranate					
6.Sapota	1574	18888	12	8000	1511.04
7.Guava	280	3360	12	10000	336.00
8.Cocoa					
9.Coconut	136	8.375 lakhs nuts	Rs.10/- Per unit		83.75
10. Oil Palm					
11. Other if any (specify)					
Sub-Total	8310	162558.2	85.7	261000	28887.86

Major Horticulture crops Grown in the istrict	Area(Ha) up to (31.3.2015)	Production (MTs)	Productivity (MT/Ha)	Average Market (Price based od 2014-15 Fig. in year) Rs/Ton	Total Value.(Rs. In Lakhs) (3*5)
1	2	3	4	5	6
III. Existing P C					
1. Poly House cultivation-Chilli Seedlings (sqmt)	12000	30 Lakh seedlings / Acer	10 Lakh seedlings / Acer	60 Paisa / Seedling	18.00
i. Vegetables - Tomato		75.6	63	12000	9.00
ii.Flowers - Hybrid Chrysanthimam					
15.Shade Net Houses (sqmt)					
i.Nurseries (specify Crops)	50000	1.25 crore seedlings	10 Lakh seedlings / Acer	60 Paisa / Seedling	75.00
ii.Vegetables. - Capsicum					
iii.Floweres (specify Crops)					
Sub-Total	62000				102.00
12.Grand Total	156408				334336.90

Major Growth Engines contributing to the GS P in Guntur istrict

Sl. No	Crop	Existing Area (Ha)	Prodn (MTs)	Value Rs. In Lakhs	Potentiality (Ha)	Additional area proposed during 2015-16			Total (Existing Proposed)		
						Area (Ha)	Prodn (MTs)	Value (Lakhs)	Area (Ha)	Prodn (MTs)	Value (Lakhs)
1	Chillies	61544	307720	209249.00	20000	6154	36924	2511.00	67698	344644	211760.00
2	Banana	5750	291550	30079.00	500	30	1500	300.00	5780	292410	30379.00
3	Turmeric	5604	33624	23537.00	1000	560	3640	2548.00	6164	37264	26085.00
4	Vegetables	11312	324597	24000.00	5000	2784	89466	10736.00	14096	414063	34736.00
5	Papaya	511	38325	2299.00	500	127	9779	587.00	638	48104	2886.00
6	Sweet Orange	2462	92325	13849.00	1000	245	0	0.00	2707	92325	13849.00
	Total	87183	1088141	303013	28000	9900	140669	16682	97083	1228810	319695.00

Annexure-III

PRIMARY SECTOR MISSION-HORTICULTURE

Interventions Proposed during 2015-16

Name of the District: GUNTUR

Sl. No	Name of the Crop	Micro Irrigation		Mulching		Farm Ponds		Pandal Cultivation		Trallies Cultivation		Canopy Management		Rejuvanation	
		Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	**Financial Rs.in Lakhs**
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	**16**
1	**T.C Banana**	20	15.92												
2	**Banana**	70	55.72												
3	**Papapa**	60	43.88												
4	**Tomato**	15	15	25	4										
5	**Onion**	12	12												
6	**R.Chillies**	913	361.11	15	2.4	12	9								
7	**Turmeric**	100	100												
8	**Water Malon**	25	10.51	9	1.44										
9	**Musk Malon**														
10	**Pine apple**														
11	**Major Veg.Crops 6 Nos**	125	125					59	147.5						
12	**Major Flower Crops 6 Nos**	70	70												
13	**Potato**														
14	**Zinger**														
15	**Capsicum**														
16	**Hy.Tomato**	15	15							70	13.12				
17	**Sub-Total**	1425	824.14	49	7.84										
	Fruits														
17	**Mango**	110	31.9												
18	**Cashew**														
19	**S.Orange**	130	37.7	10	1.6									200	**30**
20	**Acide Lime**	90	26.1	10	1.6							170	10.2	140	**21**
21	**Pomegranete**														
22	**Sapota**	20	5												
23	**Guava**	40	11.6												
24	**Cocos**														
25	**Coconut**														
26	**Oil Palm**														
27	**Other if any**	685	271.17												
	Sub-Total	1075	383.47	20	3.2										
	Grand Total	**2500**	**1207.61**	**69**	**11.04**	**12**	**9**	**59**	**147.5**	**70**	**13.12**	**170**	**10.2**	**340**	**51**

Sl. No	Name of the Crop	Protected Cultivation Poly Houses (sqmts)		Shadenet Houses (sqmts)		IPM on			
		Vagetables (sqmts)		Nurseries		Vegetables		R.Chillies	
		Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	**Financial Rs.in Lakhs**
1	2	17	18	21	22	27	28	29	**30**
1	T.C Banana								
2	Banana								
3	Papapa								
4	Tomato								
5	Onion								
6	R.Chillies							810	**24.3**
7	Turmeric								
8	Water Malon								
9	Musk Malon								
10	Pine apple								
11	Major Veg.Crops 6 Nos					400	12		
12	Major Flower Crops 6 Nos								
13	Potato								
14	Zinger								
15	Capsicum	12000	63.6						
16	Hy.Tomato			50000	150				
17	Sub-Total								
	Fruits								
17	Mango								
18	Cashew								
19	S.Orange								
20	Acide Lime								
21	Pomegranete								
22	Sapota								
23	Guava								
24	Cocos								
25	Coconut								
26	Oil Palm								
27	Other if any								
	Sub-Total								
	Grand Total	**12000**	**63.6**	**50000**	**150**	**400**	**12**	**810**	**24.3**

DEPARTMENT OF FISHERIES GUNTUR DISTRICT

FISHERIES SECTOR- PRODUCTION AND GVA FOR 2014-15 WITH PROJECTIONS FOR 2015-16

Name of the District	2014-15 Fish & Prawn production Achievements							value 14-15 (Rs.Lakhs)	GVA (AE) after deducting 18% input cost
	Inland Fish	Marine Fish	Shrimp14-15			Total Shrimp	Total Production (Tonnes)		
			Brackish water Shrimp	Marine Shrimp	Fresh water Prawn				
Guntur	30381	31460	7594	7454	3326	18374	80215	125795	103152

2015-16 Fish & Prawn Targets								GVA (AE) after deducting 18% input cost	% of Growth rate on Production	Growth Rate on Production Value	Growth Rate on GVA
Inland Fish	Marine Fish	Shrimp15-16			Total Shrimp	Total Production (Tonnes)	Value 15-16 (Rs.Lakhs) (AE)				
		Brackishwater Shrimp	Marine Shrimp	Fresh water Prawn							
32650	31450	13600	7900	5530	27030	91130	162143	132957	13.61	28.89	28.89

ACTION PLAN FOR GUNTUR DIST. FOR 2015-16

Name of the scheme: Action plan FDO wise for promotion of Scampi hatchery during 2015-16

S.no.	FDO	Village/mandal	Mandal	Extent
1	Smt A.Usha Kiran, Cell.No:9989159638 FDO,bapatla	Suryalanka ,Bapatla	Bapatla	5.5 ha (1 unit)

Name of the scheme: Revival of Scampi culture

Assistance proposed in Guntur district: 60lakhs

S.no.	FDO	Village/mandal	Mandal	No of hectares proposed
1	Sri P.Sambasiva Reddy,AIF,Sattenpalli contact no:9866872206	Brugubanda of	Sattenpalli	10
		Thondapi of	Muppalla	10
2	Sri N.Jaggaiah,FDO,Vinukonda Cell.no:9440524381	Madamanchipadu ,	Vinukonda.	4
		Ummadavaram	Vinukonda	4
		Nuzendla	Nuzendla	4
		Kanumarlapudi	Savalyapuram	4
		Potturu	Savalyapuram	4
3	Sri G.Radha Krishna,FDO,Tenali Cell.no:9848432511	Chinaravuru	Tenali	5
		Kuchipudi	Amarthalur	5
		Pedapudi,	Amarthalur	5
		Inturu	Amarthalur	5

Name of the scheme: Promotion of Tilapia culture

Assistance proposed: 30 lakhs

S.no.	FDO	Village	Mandal	No. of hectares proposed
1	Sri G.Radha Krishna,FDO,Tenali Cell.no:9848432511	Chinaravuru	Tenali	3
		Kuchipudi	Amarthalur	4
		A.Gudavalli I	Vemur	3
2	Smt A.Usha Kiran,FDO,Bapatla cell.no:9989159638	Mullapalem	Bapatla	4
		Jammulapalem	Bapatla	3
		Jillellamudi	Bapatla	3
3	Smt P.Madhavi Latha.FDO,Repalle Cell.No:94939241167	Nalluru	Repalle	4
		Manthripalem	Nagaram	3
		Yeletipalem	Nagaram	3

Name of the scheme: Backyard hatcheries for ornamental fish for SHGs/Coops/individuals

Assistance proposed in Guntur dist : 20 units

S.no.	FDO	Village	Mandal	No. of units
1	Sri V.Bala Krishna,FDO,Guntur cell.No:9032410979	Gorantla,	Guntur	3
		Guntur	Guntur	3
		Tadikonda	Tadikonda	4
2	Sri G.Radha Krishna,FDO,Tenali Cell.no:9848432511	Chinaravuru	Tenali	3
		Kuchipudi	Amarthalur	4
		A.Gudavalli	Vemur	3

Name of the scheme: Revolving fund for fisher women (FWCS/MMGs)

Assistance proposed in Guntur dist : 05 units

S.no.	FDO	Village	Mandal	No. of units
1	Smt P.Madhavi Latha.FDO,Repalle Cell.No:94939241167	Mollagunta	Repalle	3
2	Sri G.Radha Krishna,FDO,Tenali Cell.no:9848432511	Kuchipudi	Amarthalur	1
3	Sri L.A.Henry,AIF,Macherla Cell.no:9866213412			1

Name of the scheme: Promotion of Mud crab culture

Assistance proposed in Guntur dist : 10 units/10hectares

S.no.	FDO	Village	Mandal	No. of hectares proposed
1	Smt P.Madhavi Latha.FDO,Repalle Cell.No:94939241167	Mollagunta	Repalle	3
		Lankevanidibba	Repalle	2
2	Sri A.V.Raghava Reddy,FDO,Nizampatnam cell.No:9701101559	Kothapalem	Nizampatnam	3
		Adavuladeevi	Nizampatnam	2

Name of the scheme: Promotion of deep sea fishing (tuna long lining) for big motorized boats

Assistance proposed: Rs 50.00 lakhs

S.no.	FDO	Village	Mandal	No of units
1	SriP.Galidemudu, FDO,Nizampatnam	Nizampatnam harbour	Nizampatnam	50

Name of the scheme: Marine Cage Culture for sustainable farming

S.no.	FDO	Village	Mandal	No. of units proposed
1	Smt A.Usha Kiran,FDO,Bapatla cell.no:9989159638	Suryalanka	Bapatla	1

Name of the scheme: Brackish water Cage Culture for sustainable farming

S.no.	FDO	Village/mandal	Mandal	No of Units proposed
1	Smt P.Madhavi Latha.FDO,Repalle Cell.No:94939241167	Raavi Anathavaram	Repalle	1
		Penumudi	Repalle	1

Name of the scheme: Fresh Water Cage Culture

S.no.	FDO	Village	Mandal	No of units proposed
1	Sri. CH.Prasad, FDO, Nagarjuna Sagar Cell NO:9346462106	Nagarjuna Sagar	Macherla	1
2	Sri.V.Bala Krishna FDO, Guntur Cell No: 9032410979	Seethanagaram	Tadepalli	1

Name of the scheme: Revival of Brackish Water Aqua culture

Assistance proposed in Guntur district:60 Lakhs

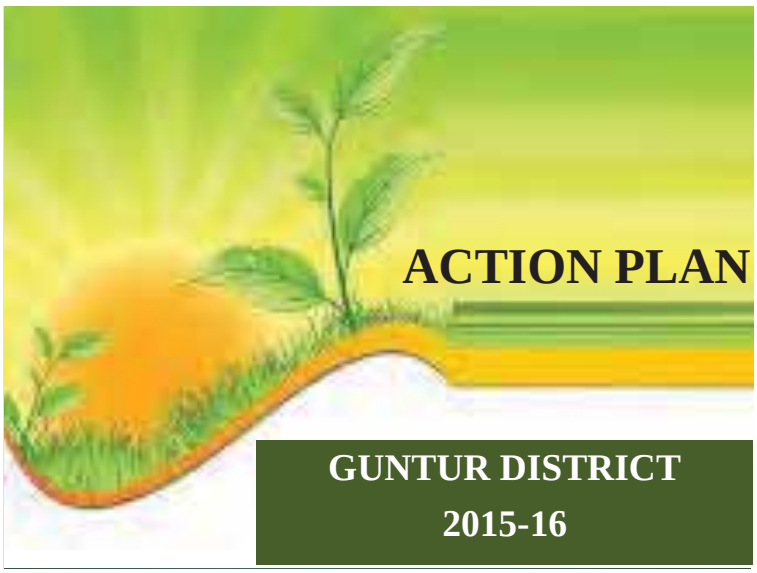
S.no.	FDO	Village/mandal	No. of units	No of units proposed
1	Smt P.Madhavi Latha.FDO,Repalle Cell.No:94939241167	Raajukalva	Repalle	25
		Lankevanidibba	Repalle	25
		Pothumeraka	Repalle	40
		Gangadipalem	Repalle	60
2	Sri A.V.Raghava Reddy,FDO,Nizampatnam cell.No:9701101559	Dindi	Nizampatnam	30
		Kopthapalem	Nizampatnam	50
		Adavuladeevi	Nizampatnam	40
		Amudalapalli	Nizampatnam	30
3	Smt A.Usha Kiran, FDO,Bapatla cell.no:9989159638	Adavi	Bapatla	20
		Buddam	Karlapalem	20
		Thummalapalli	Karlapalem	10
		Pedapuluguvaripalem	Karlapalem	10
		Ganapavaram	Karlapalem	10
		Pittalavanipalem	Pittalavanipalem	10
		Khazipalem	Pittalavanipalem	10
		Alluru	Pittalavanipalem	10
		Alkapuram	Pittalavanipalem	10
Total				410

Name of the scheme: Remodelling the existing Fish Farm as per requirement of brood bank , collection of brood from various river courses , etc.,

Assistance proposed: Rs 100.00 lakhs

S.no.	FDO	Village	Mandal	No. of units
1	Sri P.Galidemudu ,FDO,Nidubrolu Cell.No:9441537798	Nidubrolu,	Ponnur	1

Thank you



STATEMENT SHOWING THE ACTION PLAN FOR ACHIEVING DOUBLE DIGIT GROWTH RATE IN AGRICULTURE IN THE GUNTUR DISTRICT FOR THE YEAR 2015-16

Sl.No.	Crop	Total Cropped Area in Ha.											
		Kharif 2014				Existing Kharif Productivity (kgs per ha.)	Rabi 2014-15				Existing Rabi Productivity (kgs per ha.)	Total Production Kharif & Rabi (in Qtls)	Gross Value (Rs. In Crores)
		Rainfed	ID	Wet	Total		Rainfed	ID	Wet	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Paddy	0		255607	**255607**	3600			32155	**32155**	3725	10399625.75	1455.95
	Jowar	32			**32**	1800		22665		**22665**	5980	1355943.00	207.46
	Bajra	689			**689**	2000		44		**44**	0	13780.00	1.72
	Ragi				**0**	0		76		**76**	450	342.00	0.05
	Maize	367			**367**	3550		71513		**71513**	7500	5376503.50	704.32
	Redgram	8861			**8861**	650		856		**856**	700	63588.50	27.66
	Bengalgram				**0**	0	9633			**9633**	1500	144495.00	45.88
	Greengram	177			**177**	750		41456		**41456**	800	332975.50	153.17
	Blackgram	1057			**1057**	700		39482		**39482**	1000	402219.00	174.97
	Groundnut	804			**804**	1550		3508		**3508**	2950	115948.00	46.38
	Sesamum	1483			**1483**	390	3414			**3414**	500	22853.70	10.51
	Castor	723			**723**	850		452		**452**	600	8857.50	3.14
	Rapeseed and Mustard					0	273			**273**	450	1228.50	0.38
	Soyabean	439			**439**	950				**0**	0	4170.50	1.04
	Cotton	206374			**206374**	550				**0**	0	1135057.00	459.70
	Tobacco					0	5778			**5778**	3000	173340.00	216.68
	Sugarcane	470			**470**	84023				**0**	0	394908.10	8.69
	Total :-												**3517.70**

Crop	Proposed Area in Ha.										Total Production Kharif & Rabi (in Qtls)	Gross Value (Rs. In Crores)
	Kharif 2015				Targetted Kharif 2015 Productivity (kgs per ha.)	Rabi 2015-16				Targetted Rabi 2015-16 Productivity (kgs per ha.)		
	Rainfed	ID	Wet	Total		Rainfed	ID	Wet	Total			
	15	16	17	18	19	20	21	22	23	24	25	26
Paddy			260000	**260000**	3885			5895	**5895**	4001	10336858.95	1447.16
Jowar	50			**50**	2300		17737		**17737**	6770	1201944.90	183.90
Bajra	650			**650**	2500				**0**		16250.00	2.03
Ragi				**0**	0		450		**450**	500	2250.00	0.35
Maize		400		**400**	3915		88317		**88317**	8500	7522605.00	985.46
Redgram	9000			**9000**	750		856		**856**	825	74562.00	32.43
Bengalgram				**0**	0	9630			**9630**	1800	173340.00	55.04
Greengram	250			**250**	850	40655			**40655**	900	368020.00	169.29
Blackgram	1265			**1265**	750	48282			**48282**	1200	588871.50	256.16
Groundnut	703			**703**	1800		2909		**2909**	3125	103560.25	41.42
Sesamum	2250			**2250**	490	3406			**3406**	550	29758.00	13.69
Castor	725			**725**	950		452		**452**	750	10277.50	3.65
Rapeseed and Mustard					0	263			**263**	500	1315.00	0.41
Soyabean				**0**	1050				**0**		0.00	0.00
Cotton	195000			**195000**	650				**0**		1267500.00	513.34
Tobacco					0		5394		**5394**	3200	172608.00	215.76
Sugarcane	445			**445**	84150				**0**		374467.50	8.24
Total :-												**3928.32**

Crop	Critical Gaps identified	Interventions proposed to bridge the gaps
	27	28
Paddy	Lack of awareness on soil health	Creating awareness on soil health through soil testing
	Non application of organic manure	Awareness on use of FYM, supply of green manure seed & organic inputs
	Seed treatment with bio fungicides is not followed	Awareness on use of Bio fungicides for seed treatment
	Using high seed rate	Awareness trainings on use of recommended seed rate
	Optimum plant population not followed	Encouraging SMSRI and Direct seeding
	Application of phosphatic fertilizers as top dressing	Educating the farmers on basal application of phosphatic fertilizer
	High cost of cultivation	Supply of Farm machinery, training on ICM practices
	Zinc deficiencies not rectified	Supply of micronutrients like Zn and awareness through trainings
	Indiscriminate use of pesticides	Awareness on IPM practices
	Rodent damage	Trainings and supply of rodenticide on whole village approach

Crop	Critical Gaps identified	Interventions proposed to bridge the gaps
	27	28
Cotton	Lack of awareness on soil health	Creating awareness on soil health through soil testing
	Non application of organic manure	Awareness on use of FYM, supply of green manure seed & organic inputs
	Seed treatment with bio fungicides is not followed	Awareness on use of Bio fungicides for seed treatment
	Application of phosphatic fertilizers as top dressing	Educating the farmers on basal application of phosphatic fertilizer
	High cost of cultivation	Supply of Farm machinery, training on ICM practices
	Indiscriminate use of pesticides	Awareness on IPM practices
	Refugee crop not followed in *Bt.* Cotton.	Awareness on advantages of growing refugee crop.
	Micronutrient deficiencies due to indiscriminate use of chemical fertilizers	Supply of micronutrients like Boron & Mg and awareness through trainings
	Increasing incidence of sucking pests including Mealy Bugs due to mono cropping	Awareness on growing intercrops like Green gram, Black gram, Cluster bean, soybean to facilitate multiplication of natural enemies for controlling sucking pests

Crop	Critical Gaps identified	Interventions proposed to bridge the gaps
	27	28
Ground nut	Lack of awareness on soil health	Creating awareness on soil health through soil testing
	Non application of organic manure	Awareness on use of FYM, supply of green manure seed & organic inputs
	Seed treatment with bio fungicides is not followed	Awareness on use of Bio fungicides for seed treatment
	Using high seed rate	Awareness trainings on use of recommended seed rate
	High cost of cultivation	Supply of Farm machinery, training on ICM practices
	Non adoption of Gypsum application	Application of Gypsum before Peg penetration for improving quality

Crop	Critical Gaps identified	Interventions proposed to bridge the gaps
Maize	Non adoption of Seed treatment with Bio fertilisers	Seed treatment with PSB
	Indiscriminate use of Fertilisers.	Create awareness for application of fertilisers as per soil test results.
	Improper water management practices.	Create awareness on integrated water management practices.
	Improper control measures for control of stem borer	Taking control measures for stem borer by application of insecticides 10 days after sowing and 22 DAS. And IPM practices.

Crop	Critical Gaps identified	Interventions proposed to bridge the gaps
Jowar	Non adoption of Seed treatment with Bio fertilisers	Seed treatment with PSB
	Improper water management practices.	Giving irrigations at critical stages.
	Improper management practices for control of stem borer.	Application of insecticides for control of stem borer during early stages of crop.

Crop	Critical Gaps identified	Interventions proposed to bridge the gaps
Red gram	Lack of awareness on soil health	Creating awareness on soil health through soil testing
	Non adoption of Seed treatment with Bio fungicides	Awareness on use of Bio fungicides for seed treatment
	Maruka Pod borer damage	Need based plant protection measures
	Wilt problem	Seed treatment and crop rotation to be followed

Crop	Critical Gaps identified	Interventions proposed to bridge the gaps
Green Gram	Non Adoption of Seed treatment with Bio fertilisers	Seed treatment with Rhyzobium culture.
	Non usage of sprinkler irrigation	Awareness on Light irrigations with sprinklers at 30 day and 55 days of crop.
	Improper control of Maruka .	Create awareness on integrated pest management practices.

Crop	Critical Gaps identified	Interventions proposed to bridge the gaps
Blackgram	Maruka pod borer damage	Need based plant protection measures
	Wilt problem	Soil application of biofungicides along with FYM
	Incidense of Yellow mosaic virus	Awareness on IPM practices to manage sucking pests and YMV resistant varieties
	Lack of awareness on biopesticides	Trainings on uses of biopestides like neem oil
	Leaf spot diseases	Need based plant protection measures
	Indiscriminate use of pesticides	Awareness on IPM practices

Crop	Critical Gaps identified	Interventions proposed to bridge the gaps
Bengal gram	wilt problem	Basal application of T.viridi
	high seed rate	Use of optimum seed rate
	non practicing of seed treatment	Seed treatment with TV/Rhizobium

Crop	Gross Value (Rs. In Crores)		Strategies to be Adopted for achieving Double Digit Growth								Remarks
			Inputs Required				Awareness Creation through Chandranna Rythu Kshetrams proposed (each 10 Ha.)	Farm Power			
	Existing Gross Value	Targeted Gross Value	Name of the Inputs	Quantity required (in MTs.)	Unit Cost (in Rs.)	Total Cost (Rs. In lakhs)		Items required Under different Categories	Physical (No.)	Financial (Rs. In Lakhs)	
	29	30	31	32	33	34	35	36	37	38	39
Paddy	1455.95	1447.16	Zypsum	3000	1527	45.81		Tractor Drawn implements	1285	190	
Jowar	207.46	183.90	ZnSO4	3900	17700	690.3		Impoved Farm Machinery	25	35	
Bajra	1.72	2.03	Boron	50	40800	20.4		Rotovators	536	268	
Ragi	0.05	0.35	*T. viridi*	30	100000	30		Harvesters	40	400	
Maize	704.32	985.46	Psuedo monos	1.5	150000	2.25		Plant Protection Equipment (Power operated)	5000	370	
Redgram	27.66	32.43	Dhaincha	800	15430	123.44		Diesel Engines	2500	450	
Bengalgram	45.88	55.04	Sunhemp	200	20880	41.76		Power Tillers	20	20	
Greengram	153.17	169.29	Pillipesara	250	28980	72.45		Tarpaulins	8000	98	
Blackgram	174.97	256.16					185	Post Harvest Equipment	370	135	
Groundnut	46.38	41.42						Mini Tractors	30	30	
Sesamum	10.51	13.69						Self Propelled Machinery	80	80	
Castor	3.14	3.65						Paddy Harvesting Package	15	180	
Rapeseed and Mustard	0.38	0.41						CHC - Cotton	55	165	
Soyabean	1.04	0.00						SMSRI	4	80	
Cotton	459.70	513.34									
Tobacco	216.68	215.76									
Sugarcane	8.69	8.24									
Total :-	**3517.70**	**3928.32**				**1026.41**				**2501**	

Overall Growth rate - 11.63%

THAN O

DEPARTMENT OF AGRICULTURE

JOINT DIRECTOR OF AGRICULTURE
KADAPA DIST

Double Digit Growth

Action Plan for the year 2015-16

Double Digit Growth

To achieve the "Double Digit Growth" one should . . . . .

- Identify the GAPS which actually hindering to maximize the productivity.

PADDY

GAP	INTERVENTIONS
Productivity enhancement interventions	
Deficit Organic matter in the Soil	Pillipesera, Daincha, sunhemp
Usage of old varieties	NDLR-8, NDLR-7, NLR 34449
Imbalanced use of Chemical fertilizers	Soil test based fertilizer usage
Imbalanced use of micro nutrients	Zinc, Boron, Gypsum
Improper water management	Effective water management,
Cost reduction interventions	
Non maintenance of optimum plant population and following traditional way of transplanting methods	i) Line sowing ii) Drum Seeding iii) SMSRI
Indiscriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds and, Alley formation
Farm Mechanization	Mechanization through Rotovators, Transplanters, Harvesters and Driers
Interventions to bring additional area into cultivation	
Repair to the minor & medium	tanks and irrigation canals and efficient water management

COTTON

GAP	INTERVENTIONS
Productivity enhancement interventions	
Refugee border crop not maintained in BT Cotton	Refugee crop with non BT Seed or Redgram seed,
Intercropping not fallowed	Encourage intercropping with redgram, Castor crop on boundaries.
Imbalanced use of micro nutrients	Zinc, Boron ,Magnesium
Improper water management	Effiecient water management
Traditional cultivation methods followed	Encouraging high density planting system .
Cost reduction interventions	
Imbalanced use of Chemical fertilizers	Soil test based fertilizer usage
Indescriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds and Stem application method, Traps and lures usage
Farm Mechanization	Mechanization, Cotton harvesters

GROUND NUT

GAP	INTERVENTIONS
Productivity enhancement interventions	
Usage of old varieties	K-9, Dharani, TAG-24,ICGV-91114
Lack of awareness on Intercropping.	Intercropping with Redgram,Fieldbean
Imbalanced use of micro nutrients	Gypsum,Zinc, Boron
Improper water management	Effective water management through Sprinklers and Form Ponds
Cost reduction interventions	
Indescriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds,Border crop with Jowar
Farm Mechanization	Mechanization

PULSES

GAP	INTERVENTIONS
Productivity enhancement interventions	
Usage of old varieties	Jaki-9218,ICPL-85063,ICPH-2740,PRG-158,BDN-711,PU 31, LBG 752, LGG 460
Imbalanced use of micro nutrients	Zinc,Boron,Gypsum
Improper water management	Effective water management through Sprinklers and Form Ponds
Cost reduction interventions	
Indescriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds,
Farm Mechanization	Mechanization, Multicrop threshers

Sl. No	Crop	Area (ha)		Target Area - Var+MN	Non-target area	Yield (kg/ha)			Production(MT)		Product value (Rs in Cr.)		
		2014-15	2015-16	ha	ha	2014-15	2015-16 (target area)	2015-16 (non-target area)	2014-15	2015-16	2014-15	2015-16	% increase
1	2	3	4			5		6	7		9	11	
1	Rice	56563	57805	15000	42805	3115	3894	3115	176194	191744	423	460	9
2	Jowar	14880	10736	3000	7736	1426	1783	1426	21219	16379	37	29	-23
3	Bajra	2889	4020	1500	2520	2050	2563	2050	5922	9010	8	13	52
4	Maize	3299	4298	3000	1298	4500	5625	4500	14846	22716	22	33	53
5	Redgram	2367	10550	4000	6550	121	242	121	286	1761	2	10	515
6	Blackgram	6486	7687	2000	5687	585	731	585	3794	4789	24	30	26
7	Bengal gram	68164	94500	20000	74500	595	744	595	40558	59203	158	231	46
8	Greengram	4200	4355	1000	3355	625	781	625	2625	2878	12	14	10
9	Groundnut	26988	68949	25000	43949	1250	1563	1250	33735	93999	165	461	179
10	Sunflower	15901	29800	10000	19800	615	769	615	9779	19865	38	76	103
11	Sesamum	15326	14950	4000	10950	475	594	475	7280	7576	39	41	4
12	Castor	686	1500	200	1300	510	638	510	350	791	1	3	126
13	Sugarcane	373	374	0	374	68500	85625	68500	25551	25619	6	6	0
14	Cotton	35127	35320	10000	25320	550	688	550	19320	20801	78	84	8
	Total	**253249**	**344844**	**98700**	**246144**				**361458**	**477129**	**1014**	**1491**	**47**

TARGETTED AREA, YIELD & PRODUCTION IN RESPECT OF Y.S.R., DISTRICT FOR THE YEAR 2015-16

S. No.	Crops	Kharif,2015	Rabi,2015-16	Total	Anticipated Yield Kharif,2015 in Kgs/Ha	Anticipated Yiled, Rabi,2015-16 in Kgs/Ha	Production Kharif,2015	Production Rabi,2015-16	Total Production
1	Rice	52500	5305	57805	3134	3062	164535	16244	180779
2	Jowar	4150	6586	10736	2050	1410	8508	9286	17794
3	Bajra	2500	1520	4020	2250	2000	5625	3040	8665
4	Maize	450	3848	4298	3915	6250	1762	24050	25812
5	Ragi	10	100	110	1200	1000	12	100	112
6	Minor Millets	200	105	305	1000	1000	200	105	305
	Cereals & Millets	**59810**	**17464**	**77274**			**180642**	**52825**	**233467**
7	Redgram	10500	50	10550	400	900	4200	45	4245
8	Bengalgram	0	94500	94500		1200	0	113400	113400
9	Greengram	605	3750	4355	750	700	454	2625	3079
10	Blackgram	817	6870	7687	750	800	613	5496	6109
11	Horsegram	640	3000	3640	550	550	352	1650	2002
12	Other Pulses	950	980	1930	900	1100	855	1078	1933
	Total Pulses	**13512**	**109150**	**122662**			**6474**	**124294**	**130768**
	FOOD GRAINS	**73322**	**126614**	**199936**			**187116**	**177119**	**364235**
13	Groundnut	55848	13101	68949	650	2250	36301	29477	65778
14	Sesamum	450	14500	14950	400	480	180	6960	7140
15	Sunflower	1800	28000	29800	600	800	1080	22400	23480
16	Saflower	120	350	470	1000	1000	120	350	470
17	Castor	1500	0	1500	500		750	0	750
	Oilseeds	**59718**	**55951**	**115669**			**38431**	**59187**	**97618**
18	Chillies	550	120	670	3900	12250	2145	1470	3615
19	Cotton	34500	820	35320	608	700	123388	3376	126764
20	Onion	2560	650	3210	19200	13320	49152	8658	57810
21	Sugarcane	374		374	78500		29359	0	29359
22	Turmeric	3480		3480	9000		31320	0	31320
		41464	**1590**	**43054**			**235364**	**13504**	**248868**
	TOTAL	**174504**	**184155**	**358659**			**460911**	**249810**	**710721**

Components required under various schemes for 2015-16

Sl. No	Component	Crop	Variety	Units	Quantity required	Covering schemes
1	Seed	Groundnut	K-6	Qtls	38000	Seed supply plan
2			K-9	Qtls	5000	
3			Dharani	Qtls	2000	
4			Narayani	Qtls	2000	
5		Redgram	LRG-41	Qtls	3000	
6			ICPL-85063	Qtls	200	
7		Paddy	JGL-1798	Qtls	100	
8			JGL-3844	Qtls	200	
9			NLR-34449	Qtls	5000	
10			NLR-33892	Qtls	500	
11		Greengram	LGG-460	Qtls	400	
12		Castor hybrid		Qtls	100	
13		Greenmanure	Daincha	Qtls	15000	
14			Sunhemp	Qtls	3000	
15			Pillipesara	Qtls	1000	
16		Redgram	ICPH-2740	Qtls	200	NFSM & NMOOP
17			PRG-158	Qtls	100	
18		Bengalgram	JAKI-9218	Qtls	1000	
19		Castor	PCH-111	Qtls	200	
20		Groundnut	ICGV-91114	Qtls	360	
21	Water Carrying Pipes			No.s	1200	NFSM, NMOOP & RKVY
22	Sprinklers			No.s	950	
23	Vermi-Hatcheries			No.s	25	
24	Portable veri-beds			No.s	1000	
25	Tarpaulin sheets			No.s	6000	
26	Zinc Sulphate			MTs	385	NFSM, NMOOP, Micro Plan & Bhuchetana
27	Boran			MTs	40	
28	Gypsum			MTs	3134	

Budget details

Sl. No.	Scheme	Scheme details	Budget releases and achievements in 2014-15 in Crores		Projected budget requirement for 2015-16 in Crores
			Releases	Achieved	
1	NMOOP	Oilseeds	2.87	2.14	2.97
2	NFSM-Rice	Rice	1.38	0.53	1.2
3	NFSM-Pulses	Pulses	2.43	1.72	3.2
4	Farm Mechanization	NSP	7.51	3.36	6.1
		RKVY		0.9	2.4
		SMAM		0.39	0.76
5	RKVY (Organic Farming)	Portable vermibeds	0.38	0.38	0.45
		Vermihatcheries	0.15	0.15	0.5
6	Seed Village Scheme	Subsidy	0.6	0.591	1.16(Pending bills of 2014-15)
		Transportation			0.0275(Pending bills of 2014-15)

THANK YOU !

Government of Andhra Pradesh
Department of Fisheries

FISHERIES EPARTMENT

KADAPA, YSR DISTRICT.

RESOURCES

1. Available water sourses :-

S.No.		No. of Water Sources	EWSA (Ha)
1	Ta	1 .I. Ta	1 30 .5 ta
		3 0 . . Ta	1 8 .50 ta
	Total	5 1 Ta	1 181.0 ta
	o	0 o	111 .00 ta
3	a o	I	I
	Total	5	1 8.0 ta

Total No. of Mandals on Kadapa dt. – 51
Total Fish Seed Farms – 03
Total Rivers – Penna, Chitravathi, Papagni, Kundu, Cheyuru, Bahuda

2. Present status of Fish Production during the year 2014-15

S. No.	No. of Water Sources	EWSA (HA)	Production (tonnes)	Productivity
1	1 Ta	1 5 ta	5 To	5 a
	3 o	103 ta	5 1 To	50 a
3			101 To	
	Total	11 3 ta	3 To	80 a

3. Anticipated Fish Production Target during the year 2015-16

S. No.	No. of Water Sources	EWSA (HA)	Production (tonnes)	Productivity
1	1 .I. Ta	1 30 .5 ta		
	3 0 . . Ta	1 8 .50 ta	5 5 To	351 a
	11 o	13 5 ta	3 11 To	a
	Total	53.0 ta	0 To	3 a

4. Strategy to increse Fish Production

S.No.	Strategy	Estimated additional articipate increase the production	Estimated Total Production	Budget requirement
1	I to a lt o tt o t l	100		
	to a a l ta a o	100		
3	o t to o a t a o a o t ta t o to	150		
	o oto o l “GIFT” Tilapia	150		
5	Ta o 5 o o I t o t 000T T			

5. Inland fish and prawn production details in M.T.

S.No.	Name of the ist.	Variety	Achievement 2014-15	Target 2015-16	ifference in production in tonnes	% Growth
1	a a a t t	I la	3 To	0 To	33 To	1 5
		at a a	I	50 To	50 To	100

S. No.	Name of the t	Production 2014-15		Target 2015-16		Gross Value added Rs.	% of Growth
		To	al . l o	To	al . l o		
1	a a a t.	3	1 .3	0	8.00	3 o	00 l a

ACTION PLAN 2015-16 IN FISHERIES SECTOR IN KADAPA DISTRICT

(1) A I M : TO ACHIEVE 2 DIGITAL GROWTH RATE.

(2) POSSIBILITIES :

1) To bring additional area under Fish culture ie. Fishery wealth in completed reservoirs will be transferred to fisheries department for enhancement of fish production.
1) Annamayya Project 2) Buggavanka Project 3) Veligallu Project
4) Gandikota Project 5) Jerrikona Project

2) The production and productivity can be increased by using new techniques
a) Introduction of Cage culture in Major reservoirs.
b) Introduction new culture specie i.e. gift Tilapia for short seasonal tanks
c) Setting of fibre marts in municipalities for increasing the fish consumption.

ACTION PLAN

TI ITI :

a o a lt a o 1 8 to 30000 ta

T IT :

ta l a a a a la l 5 o . . 1 a a a o t a a a o t 3 l all o t a ota o t 5 o a o t

I T TI :

1 ltat o o ta to o oo al t o a a l to ta o a t o o t o t o t to o a t a o ta l.

T T:

o to a o 3 to to 0 a l a to a t o al o

HORTICULTURE-YSR DISTRICT

PRIMARY SECTOR MISSION-2015-16

Growth Engines

Banana
Papaya
Tomato
Chillies

PRIMARY SECTOR MISSION (HORTICULTURE)- 2015-16

Growth Engines to achieve Double digit growth at the end of 2015-16

Name of the istrict : YSR istrict

S. No	Growth Engines	2014-15					2015-16			
		Area (Ha)	Productivity (tonne/ ha.)	Production (in Tonnes)	Price per Tonne	GVA (in Crores)	Area (Ha)	Productivity (tonne /ha.)	Production (in Tonnes)	GVA (in Crores)
1	Banana	11000	60	660000	12000	792.00	13000	62.5	812500	975.00
2	Tomato	7000	38	266000	8000	212.80	8500	40	340000	272.00
3	Papaya	2320	75	174000	10000	174.00	2500	75	187500	187.50
4	Chillies	757	4	3028	70000	21.20	2000	5	9785	68.50
Total		21077		1103028		1200	26000		1349785	1503.00

PRIMARY SECTOR MISSION (HORTICULTURE)- 2015-16

Percentage of Growth and GVA (in Crores) at constant prices

Name of the istrict: YSR istrict

Sl. No.	Growth Engines	2014-15	2015-16	
		GVA (in Crores)	GVA (in Crores)	% Growth in GVA
1	Banana	792.00	975.00	23.1
2	Tomatoes	212.80	272.00	27.8
3	Papaya	174.00	187.50	7.8
4	Chillies	21.20	68.50	223.2
	Total	**1200.0**	**1503.0**	**25.3**

DEPARTMENT OF HORTICULTURE

Activities and Strategies

Growth Engine –Banana

Area Expansion
Tissueculture Plants
IPM
INM
Capacity building

DEPARTMENT OF HORTICULTURE

Activities and Strategies

Growth Engine –Papaya

Area Expansion
IPM
INM
Capacity building
Mass production &
release of predators
against mealy bug

DEPARTMENT OF HORTICULTURE

Activities and Strategies

Growth Engine –Tomato

Seedlings
Trellies
Mulching
IPM
INM
Capacity building
Special package for SATLM

DEPARTMENT OF HORTICULTURE

Activities and Strategies

Growth Engine –Chillies

Seedlings
IPM
INM
Capacity building

PRIMARY SECTOR MISSION (HORTICULTURE)- 2015-16

Budget Requirement Proposal

Name of the istrict : YSR istrict

Sl. No	Name of the Crop	Units No/sq mt/Ha	Additional Area Proposed (Ha) (2015-16)	Financial Budget requirement (Rs. In Lakhs)												Total Budget Requirement (Rs. In Lakhs)
1	2	3	4	5												6
				Area Expansion	Budget Requirement	IPM (Ha)	Budget Requirement	INM (Ha)	Budget Requirement	Seedlings	Budget Requirement	Trellies (Ha)	Budget Requirement	Mulching	Budget Requirement	
1	T.C. Banana	Ha	2000	2000	614.78	2000	24.00	2000	24.00	0	0	0	0	0	0	662.78
2	Papaya	Ha	180	180	44.392	1000	12.00	1000	12.00	0	0	0	0	0	0	68.39
3	Tomato	Ha	1500	0	0	300	3.60	0	0	1500	90	420	78.75	100	16	188.35
4	Red Chillies	Ha	1200	0	0	1200	14.40	1200	14.40	1200	72	0	0	0	0	100.80
														Total		1028.32

Crop wise Action Plan for Micro irrigation

Sl.No	Name of the Crop	Area Proposed in ha
1	Vegetables	830
2	Chillies	520
3	Banana	2800
4	Papaya	540
5	Turmeric	120
6	Flowers (Open)	100
7	Sugarcane	
8	Cotton	860
9	Maize	
10	Acid Lime	160
11	Pomegranate	100
12	Sweet Orange	420
13	Mango	600
14	Betelvine	75
15	Groundnet	1000
16	Onion	100
17	Tomato	2000
18	Others	125
	Total	10250
	Budget	80,00,00,000

HORTICULTURE-YSR DISTRICT
PRIMERY SECTOR MISSION 2015-16

Issues

- **Assistance on Farmponds may be increased to 75% to 90%.**
- **Permission to implement area expansion with existing drip system.**
- **Subsidy on seedlings for Tomato,Chillies etc.**
- **Assistance on IPM&INM may be enhanced to 50%@Rs2500/ha.**

Primary Sector – 2015 Plan of Action for Kadapa district Pilot Site

(Primary Sector Kadapa Team/Team Building and Planning Workshop, ICRISAT, Patancheru, Telangana state, India/28-29 April 2015)

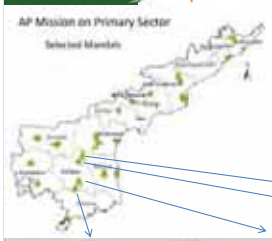
ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Summary of value addition in Kadapa Pilot site

S. No.	Sector	Value added (Crores)
1	Agriculture	9.24
2	Milk	3.67
3	Meat	2.66
4	Egg	0.05
5	Fisheries	0.06
6	Vegetables	3.37
7	Rejuvenation of plantations	0.31
	Total	19.36

ICRISAT

Kadapa - Pilot Sites Identification



4 mandals – 13 villages

S. No.	Mandal	Rainfall (mm)	Village(s) name	Remarks
1	Poromamilla	820	Siddavaram, Ganugapenta, Challagigella, Venkataramapuram	2012-13 watershed program
2	Brahmamgari - matham	750	Godlaveedu, Gundapuram, Dirasavancha, Nagisettypalli	2012-13 watershed program
3	Veerapalli	640	Veerapalli, Matli	2009-10 watershed program
4	Sambepalli	670	Settipalli, Devpatla, Gutapalli	2009-10 watershed program; 2014-15 watershed in some hamlet

Pilot Site – Land Utilization

- Groundnut, Paddy, Cotton, sunflower – important crops
- Declining yields – low hanging fruits thru soil fertility, varieties, water management and mechanization for timely sowing/operations

Mandal	Village	Geographical area (ha)	Net cultivable area (ha)	2014-15 Kharif crops (acres)						2014-15 Rabi crops (acres)						Forest area (ha)	Permanent pastures (ha)	Current fallow land (ha)
				Paddy	Bajra	Cotton	Groundnut	Redgram	Veg	Fruits	Paddy	Cotton	Maize	Sunflower	Groundnut	Horsegram	Veg	Fruits			
Porumamila	Siddavaram	3097	740	270	200	100			18		120	120	150				5		2360	0	60
	Ganugapenta	4598	348	350	200	120			10		90	170	210				30		2737	11	53
	Challagirigella	5884	828	300	150	80			10		80	100	200				20		4019	0	1265
	Venkataramapuram	330	702	1314	190	90			20		70	130	180				20		0	0	30
B Matam	Godlaveedu	1156	252	985		150						80		200					578	0	0
	Gundapuram	2255	377	2335		100			10			150		100					1612	0	218
	Dirasavancha	2369	424	1523		100			5			70		800					1481	0	177
	Nagisettipalle	736	222	187															14	0	233
Veeraballe	Veeraballe	3702	1314	75			550	50	10	850					200	400	5	850	76	0	85
	Matli	3533	985	20			530		14	440					120	195	13	440	0	0	130
	Settipalle	7761	2335	400			2000		100	440					500		270		0	0	1690
Sambepalle	Devapatla	3319	1523	50			800		20	380					400		370		0	0	480
	Guttapalle	638	187	30			200		15	53					50		60		0	0	120
		9378	0237	395			740		080	50	232	163	360	320	740	100	270	595	793	290	2878	11	542

Kadapa Pilot Sites – Farm Holdings

97% holdings having less than 5 ha and operating on 88% area

Mandal	Village	Total holdings		Marginal & Small holdings		Semi-Medium holdings		Medium holdings		Large holdings	
		No.	Area (acres)	No.	Area (acres)	No.	Area (acres)	No.	Area (acres)	No	Area (acres)
Porumamila	Siddavaram	420	1067	373	699	45	267	1	10	1	90
	Ganugapenta	769	1721	701	1285	63	374	5	62	0	
	Challagirigella	88	238	79	160	7	43	2	35	0	
	Venkataramapuram	203	425	190	332	12	80	1	12	0	
B.Matam	Godlaveedu	477	963	462	863	14	73	0		1	26
	Gundapuram	164	347	156	305	8	43	0		0	
	Dirasavancha	915	1771	884	1568	25	126	6	77	0	
	Nagisettipalle	478	916	466	834	10	53	2	29	0	
Veeraballe	Veeraballe	1542	4809	1253	2690	255	1658	33	429	1	32
	Matli	1393	4050	1195	2640	175	1084	22	296	1	29
Sambepalle	Settipalle	2816	10951	2080	5118	625	4217	104	1329	7	288
	Devapatla	1623	6176	1191	2735	349	2264	77	987	6	190
	Guttapalle	358	1558	236	574	98	668	24	317	0	
	Grand Total	**11246**	**34991**	**9266**	**19802**	**1686**	**10950**	**277**	**3583**	**17**	**655**
	% of total			**82**	**57**	**15**	**31**	**2**	**10**	**0.2**	**2**

Kadapa Pilot Sites – Gross sown area

Rabi season sowing primarily dependant on irrigation

Mandal	Village	Kharif season (acres) - 2013-14						Rabi season (acres) - 2013-14					
		Tanks	Canal	Tube-wells	With Pump-sets	Un-irrigated	Total	Tanks	Other surface	Tube-wells	With Pump-sets	Un-irrigated	Total
Porumamila	Siddavaram			304		59	363	72		171		8	251
	Ganugapenta			260		66	326			246		12	258
	Challagirigella			405		26	431			99		10	109
	Venkataramapuram			150		12	162			198		10	208
B.Matam	Godlaveedu			221		11	232			150	0	0	150
	Gundapuram			110		0	110			80		0	80
	Dirasavancha		30	420		51	501			193	2	0	195
	Nagisettipalle		70	380		41	491			90		0	90
Veeraballe	Veeraballe			951	297	656	1904	115		898	87	425	1525
	Matli	80		413	130	1035	1658			583	86	427	1096
Sambepalle	Settipalle			697		4408	5105	105	50	1359	63	659	2236
	Devapatla			457		2823	3280	20		925	80	350	1375
	Guttapalle			97		252	349			196		80	276
	Grand Total	**80**	**100**	**4865**	**427**	**9440**	**14912**	**115**	**0**	**1994**	**175**	**852**	**3136**
	% of total					**63**						**27**	

Kadapa Pilot Sites – Livestock

Constraints: Lack of adequate & nutrious fodder, improper feeding schedule; Low yielding breeds, Animal health issues, Markets

Mandal	Village	Breedable cattle	Breedable buffaloes	Total	Animal in milk	Sheep	Goat	Poultry birds	Fisheries	
									No	Area (acre)
Porumamila	Siddavaram	5	**832**	837	374	2874	411	886	1	63
	Ganugapenta	12	**783**	795	331	2499	964	1463		
	Challagirigella	0	**1025**	1025	441	1144	921	1800		
	Venkataramapuram	20	**398**	418	154	4060	464	766	1	30
BMatam	Godlaveedu	0	**211**	211	111	3608	162	514		
	Gundapuram	0	**25**	25	18	773	100	87		
	Dirasavancha	0	**528**	528	278	6109	888	1990		
	Nagisettipalle	10	**344**	354	235	1881	135	603	1	28
Veeraballe	Veeraballe	**369**	250	619	480	6055	1979	14927	2	262
	Matli	**587**	746	1333	569	6429	2436	9047	1	45
Sambepalle	Settipalle	**1638**	116	1754	824	18083	1641	8818		
	Devapatla	**1130**	155	1285	1021	25374	245	4447		
	Guttapalle	**267**	70	337	247	1918	129	620		
	Grand Total	**4038**	**5483**	**9521**	**5083**	**80807**	**10475**	**45968**	**6**	**427**

2015 Plan of Action - Agriculture

- Soil test-based application of secondary- & micro- nutrients (6400 ha)
- Improved varieties (6400 ha)
- Seed production
- Landform management
- Sowing of kharif (500 ha) and rabi (200 ha) fallows
- Mechanization through CHCs (4 new)
- Recycling of on-farm wastes to make quality composts – pilot (100 no)
- Wastewater recycling agriculture – pilot (1 no)
- Capacity building in best agricultural practices (~120 no)

Mandal	Crop	Extent	Variety + Soil test-based sec & micronutrients	Targeted area (ha)	Present Productivity Kgs/ha	Targetted productivity Kg/Ha	Present production in Mts	Present Growth Value Rs in Crores	Increased production (tones)	Additional value (cr)	Trainings	Tours	Hatchery	CHC	Convergence
Porumamilla	Paddy	419	NLR-3449, NDLR-7, NDLR-8	269	3115	3894	1305	2.87	209.48	0.46	9	1	1		NFSM,NMOOP,RKVY,Farm Mechanisation,Bhuchetana and polambadi
	Cotton	258	Bt-II Hybrids	258	550	687.5	141.9	0.60	35.475	0.15	6				
B.Mattam	Paddy	1060	NDLR-7, NDLR-8, NLR-3449	700	3115	3894	3302	7.26	545.13	1.20	18	1	1		
	Cotton	141	Bt-II Hybrids	141	550	687.5	77.55	0.33	19.388	0.08	3				
Veeraballi	Paddy	595	NLR-3449, NDLR-8	325	3115	4828	1853	4.08	556.81	1.22	15				
	Ground nut	487	K-6, K-9, Dharani	487	1250	1563	608.8	2.74	152.19	0.68	12	1	1		
	Redgram	490	ICPL-85063, ICPH-2740, LRG-41	400	121	242	59.29	0.40	48.4	0.33	12				
Sambepalli	Paddy	140	NLR-3449, NDLR-8	140	3115	3894	436.1	0.96	109.03	0.24	3				
	Ground nut	5750	K-6, K-9, Dharani	3125	1250	1563	7188	32.3	976.56	4.39	24	1	1		
	Redgram	570	ICPL-85063, ICPH-2740, LRG-41	570	121	242	68.97	0.47	68.97	0.47	15				
Total		**9910**		**6415**	**16302**	**21494**	**15041**	**52.1**	**33303**	**9.24**					

2015 Plan of Action – AH - Milk

- Fodder (Jowar, Bajra, maize) promotion: 500 ha [District level: 8800 ha to 12000 ha]
- Silage: ~2 in each pilot village i.e. ~26 total [District level: 100 units - 1 to 2 per mandal]
- Health camps – deworming/vaccination of 70% livestock; AI of 10% livestock
- Concentrated feed for 6 months (~2000 livestock)
- CB – ~4000 farmers

Village	Milk production		
	2014-15 (ltr)	2015-16 (ltr)	Value added (Rs)
Siddavaram	409530	491436	2702898
Ganugapenta	362445	434934	2392137
Challagirigella	482895	579474	3187107
Venkataramapuram	168630	202356	1112958
Godlaveedu	121545	145854	802197
Gundapuram	19710	23652	130086
Dirasavancha	304410	365292	2009106
Nagisettipalle	257325	308790	1698345
Veeraballe	525600	630720	3468960
Matli	623055	747666	4112163
Settipalle	902280	1082736	5955048
Devapatla	1117995	1341594	7378767
Guttapalle	270465	324558	1785069
Total	**5565885**	**6679062**	**36734841**
			3.67 crores

2015 Plan of Action – AH - Meat

- Deworming – twice in a year (100% livestock)
- Sheep & goat distribution (5+1 Ram) = 65 units (thru bank finance + 25% incentive
- CB

Village	Sheep meat			Goat meat			Poultry meat			Total value added (Rs)
	2014-15 (kg)	2015-16 (kg)	Value added (Rs)	2014-15 (kg)	2015-16 (kg)	Value added (Rs)	2014-15 (kg)	2015-16 (kg)	Value added (Rs)	
Siddavaram	14226	16360	853578	1562	1796	93708	498	548	4984	952270
Ganugapenta	12370	14226	742203	3663	4213	219792	823	905	8229	970224
Challagirigella	5663	6512	339768	3500	4025	209988	1013	1114	10125	559881
Venkataramapuram	20097	23112	1205820	1763	2028	105792	431	474	4309	1315921
Godlaveedu	17860	20539	1071576	616	708	36936	289	318	2891	1111403
Gundapuram	3826	4400	229581	380	437	22800	49	54	489	252870
Dirasavancha	30240	34775	1814373	3374	3881	202464	1119	1231	11194	2028031
Nagisettipalle	9311	10708	558657	513	590	30780	339	373	3392	592829
Veeraballe	29972	34468	1798335	7520	8648	451212	8396	9236	83964	2333511
Matli	31824	36597	1909413	9257	10645	555408	5089	5598	50889	2515710
Settipalle	89511	102937	5370651	6236	7171	374148	4960	5456	49601	5794400
Devapatla	125601	144441	7536078	931	1071	55860	2501	2752	25014	7616952
Guttapalle	9494	10918	569646	490	564	29412	349	384	3488	602546
Total	399995	459994	**23999679**	39805	45776	**2388300**	25857	28443	**258570**	**2,66,46,548**
										2.66 cr

2015 Plan of Action – AH - Eggs

- Vaccination & deworming – 100% birds
- Chick distribution = 45 birds unit to each of 5 farmers in 13 pilot villages
- CB

Village	Poultry Eggs		
	2014-15 (No)	2015-16 (No)	Value added (Rs)
Siddavaram	33225	36548	9968
Ganugapenta	54863	60349	16459
Challagirigella	67500	74250	20250
Venkataramapuram	28725	31598	8618
Godlaveedu	19275	21203	5783
Gundapuram	3263	3589	979
Dirasavancha	74625	82088	22388
Nagisettipalle	22613	24874	6784
Veeraballe	559763	615739	167929
Matli	339263	373189	101779
Settipalle	330675	363743	99203
Devapatla	166763	183439	50029
Guttapalle	23250	25575	6975
Total	1723800	1896180	**5,17,140**
			0.05 cr

2015 Plan of Action - Fisheries

- Currently no production in 6 ponds in pilot sites
- Effective area = 150 ha
- Convergence with MNGREGS

S. No.	Intervention	Effective Area	Cost (Rs)	Return	Value added (Rs)
1	Release of 25mm seedlings (Katla, Rohru, Mrugal) after 1 month stocking	150 ha/ 6 ponds	300000	900000	6,00,000
2	Capacity-building/awareness	6	-	-	-
					0.06 cr

2015 Plan of Action - Horticulture

1. New areas under vegetable cultivation (convergence for MI)

Mandal	Area (acre)	Investment/acre							Return			Net return (Rs)
	Tomato/ Hyb veg	Seedling	Staking	Plastic mulching	IPM	INM	Per acre	Total investment (Rs)	Productivity kg/ac	FGP/kg	Return (Rs)	
Porumamila	75	2400	0	12800	480	480	16160	1212000	8000	8	4800000	3588000
B Matam	50	2400	0	12800	480	480	16160	808000	8000	8	3200000	2392000
Sambepalle	250	2400	7500	12800	480	480	23660	5915000	16800	8	33600000	27685000
Total												3,36,65,000

2. Rejuvenation of existing plantation (convergence for MI)

Mandal	Crop	Area (acre)	Productivity improvement (kg/ac)	Price/kg	Return (Rs)	Expenditure (Rs)	Net return (Rs)
Veeraballe	Mango	250	360	20	1800000	250000	1550000
Sambepalle	Mango	250	360	20	1800000	250000	1550000
Total							31,00,000

3. New plantations = 400 acres; ~ 13 lakh cost (convergence for MI)

Kadapa district – Banana:

New Plantation = 2000 ha [Cost = 20 crore; Return = 186 cr]

Existing plantation= 11000 ; Prod imp by 5t ha^{-1} thru CB [Addnl Return = 82cr]

Banana in Kadapa: Cost = 20 crore; Additional Return = 268 crore

2015 Plan of Action - Watershed

Village	Repair - Check dam	Repair - Check wall	Repair- Percolation tank	Repair - Med percolation tank	New - Check dam	New - Check wall	Farm pond	Dug-out pond	New - Percolation tank	Plantation (acre)	Prod - converge - Ag, Hort, AH (Lakh)	CB	Total Fin (Lakhs)
Godlaveedu	5		4							10			
T.Soudrapalli	4		2							16			
Dirasavancha	3									10	22.22	8.24	80.84
Nagisettipalli	1									8			
Gundapuram	2									12			
Settipalli	5		3	1	3		8		1	90			
Guttapalli	4									96	26.5	9	268.4
Devpatla	20		3							96			
Veeraballe	20	3	15				15			250	12.5	5	193.3
Matli													
Ganugapenta	6		6		6	8	30	16	3	23			
Challagirigella	5		3		4	6	25	11	2	8	17	5.15	217.04
Venkatrampuram	3		1				1		1	6			
Siddavaram					2	1	4			6			
Total	78	3	37	1	15	15	83	27	7	631	78.22	27.39	759.58

2015 Plan of Action – Micro-irrigation

Mandal	Village	Drip		Sprinkler		G. Total of MI	
		No	Area (acre)	No	Area (acre)	No	Area (acre)
Porumamila	Siddavaram	11	57	1	3.75	12	61
	Ganugapenta	-	-	-	-	-	-
	Challagirigella	2	9	-	-	2	9
	Venkataramapuram	-	-	-	-	-	-
BMatam	Godlaveedu	51	119	4	8.6	55	127
	Gundapuram	1	4			1	4
	Dirasavancha	16	62	17	13.55	33	76
	Nagisettipalle	4	9	-	-	4	9
Veeraballe	Veeraballe	30	92	64	196.875	94	289
	Matli	48	155	25	73.3	73	228
Sambepalle	Settipalle	119	387	18	47.15	137	434
	Devapatla	74	210	1	2.525	75	213
	Guttapalle	22	76	-	-	22	76
	Total	378	1180	130	346	508	1525

Important crops covered >>>>>

MI System	Crop	No	Area (acre)
Drip	Fruit (mango +)plants	51	214
	Vegetables (Tomato +)	252	768
	Cotton	69	183
Sprinkler	Groundnut	118	339
	Maize	2	6
	Total	492	1511

Thank you!

Thankfully Acknowledge Kadapa Team;
Collector
CPO & staff
JD Agriculture & staff
JD Animal Husbandry & staff
PD-Micro-Irrrigation & staff
AD Horticulture & staff & staff
Addl PD-DWMA & staff
AD-Fisheries & staff

DEPARTMENT OF AGRICULTURE

JOINT DIRECTOR OF AGRICULTURE
KURNOOL

Double Digit Growth

- To achieve the "Double Digit Growth" one should identify the GAPS which actually hindering to maximize the productivity.

TARGETTED FOR GROWTH VALUE ADDED FOR 2015-16

Sl.No.	Name of the Sub-division	Growth Engine for the year 2014-15	Growth Engine Projection for the year 2015-16	Net Difference Projected	Percentage Growth Projected
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3	Nandikotkur	221.20	255.84	34.64	15.66
4	Atmakur	217.45	251.83	34.38	15.81
5	Nandyal	480.06	523.13	43.07	8.97
6	Allagadda	72.49	84.64	12.15	16.76
7	Koilakuntla	800.49	1028.61	228.12	28.50
8	Adoni	766.65	904.09	137.44	17.93
9	Alur	397.25	443.47	46.22	11.63
10	Yemmiganur	584.60	700.60	116.00	19.84
11	Pattikonda	146.77	273.96	127.19	86.66
	GRAND TOTAL	4118.64	4961.68	843.04	20.47

District GVD : 20.47%

TARGETED AREA,YIELD AND PRODUCTION FOR DIFFERENT AGRICULTURAL CROPS FOR KHARIF 2015 AND RABI 2015-16

Sl.No	Name of the Crop	Kharif 2015					Rabi 2015-16				
		Expected Area in Ha	Normal Yield Kgs/Ha	Yields Kharif 2014 Kgs/Ha.	Expected Yield Kgs/Ha	Production in M.Ts	Expected Area in Ha	Normal Yield Kgs/Ha	Yields Rabi 2014-15 Kgs/Ha	Expected Yield Kgs/Ha	Production in M.Ts
1	Rice	93000	3410	5894	6500	604500	40000	4200	4200	4300	172000
2	Jowar	18500	3151	2724	3500	64750	55000	2900	2900	3500	192500
3	Bajra	10000	1023	1284	1350	13500	500	1000	1000	1200	600
4	Maize	45000	4530	3638	6100	274500	25000	6000	6000	6500	162500
5	Ragi	0			0	0	0			0	0
6	Minor Millets(Korra)	15000	848	961	1020	15300	2500	750	750	800	2000
	Course Grain	**181500**					**123000**				
7	Redgram	53000	421	402	650	34450	2500	850	850	900	2250
8	Bengal Gram	0			0	0	200000	1050	1050	1200	240000
9	Greengram	2500	576	1081	1200	3000	4500	650	650	850	3825
10	Blackgram	5000	625	1331	1600	8000	7500	750	750	900	6750
11	Horsegram	100	650	650	750	75	500	650	650	700	350
12	Other Pulses	100			700	70	500	650	650	700	350
	Total Pulses	**60700**					**215500**				

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Sl.No	Name of the Crop	Kharif 2015					Rabi 2015-16				
		Expected Area in Ha	Normal Yield Kgs/Ha	Yields Kharif 2014 Kgs/Ha.	Expected Yield Kgs/Ha	Production in M.Ts	Expected Area in Ha	Normal Yield Kgs/Ha	Yields Rabi 2014-15 Kgs/Ha	Expected Yield Kgs/Ha	Production in M.Ts
13	Groundnut	18000	582	835	1150	20700	30000	1000	1000	1150	34500
14	Sesamum	1000	650	650	700	700	7500	650	650	700	5250
15	Castor	40000	457	669	750	30000	500	600	600	700	350
16	Sunflower	10000	800	825	875	8750	25000	700	700	900	22500
17	Safflower	500	550	650	800	400	2000	750	750	800	1600
19	Rape & Mustred	0			0	0	6000	650	650	750	4500
21	Other Oil Seeds	500			850	425	1500	600	600	650	975
	Total Oil Seeds	**70000**					**72500**				
22	Cotton	350000	375	450	550	192500	500	450	450	500	250
23	Mesta	500	550	550	600	300	1500	550	550	600	900
24	Chillies	25000	2607	3599	4000	100000	5000	3400	3400	3800	19000
25	Sugarcane	3000	93000	93500	95000	285000	0	0	0	0	0
26	Onion	35000	2500	2800	3000	105000	5000	2000	2000	2500	12500
27	Turmiric	4500	3500	3000	3150	14175	0			0	0
28	Tobacco	1500	3200	3500	4000	6000	15000	4000	4000	4500	67500
	Total Cropped Area	**731700**					**438000**				

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PADDY

GAP	INTERVENTIONS
	Productivity enhancement interventions
Deficit Organic matter in the Soil	Pillipesera, Daincha, sunhemp
Usage of old varieties	MTU-1061, MTU-1075, MTU-1064, NLR 34449
Imbalanced use of Chemical fertilizers	Soil test based fertilizer usage
Imbalanced use of micro nutrients	Zinc, Boron, Gypsum
Improper water management	Effective water management
	Cost reduction interventions
Non maintenance of optimum plant population and following traditional way of transplanting methods	i) Broadcasting ii) Drum Seeding iii) SMSRI
Indiscriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds and with special reference to Rodents
Farm Mechanization	Mechanization through Rotovators, Transplanters, Harvesters and Driers
	Interventions to bring additional area into cultivation
Repair to the minor & medium	tanks and irrigation canals

MAIZE

GAP	INTERVENTIONS
Productivity enhancement interventions	
Deficit Organic matter in the Soil	Pillipesera, Daincha, sunnhemp
Imbalanced use of Chemical fertilisers	Soil test based fertilizer usage
Imbalanced use of micro nutrients	Zinc, Boron ,Gypsum
Improper water management	Effective water management
Lack of awareness on other corn varieties	popularizing the other corn varieties like baby corn , sweet corn and pop corn.
Cost reduction interventions	
Lack of awareness on Zero Tillage practice	Adopting Zero tillage in rice fallows
Indescriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds
Farm Mechanization	Mechanization

GROUNDNUT

GAP	INTERVENTIONS
Productivity enhancement interventions	
Usage of old varieties	K-9, Dharani, Anantha
Lack of awareness on Gypsum usage	Application of Gypsum
Imbalanced use of micro nutrients	Zinc, Boron
Improper water management	Effective water management through Sprinklers and Form Ponds
Cost reduction interventions	
Indescriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds
Farm Mechanization	Mechanization

SUMMER PULSES

GAP	INTERVENTIONS
Productivity enhancement interventions	
Usage of old varieties	PU 31, LBG 752, LGG 460
Imbalanced use of micro nutrients	Zinc,Boron,Gypsum
Improper water management	Effective water management through Sprinklers and Form Ponds
Cost reduction interventions	
Indescriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds
Farm Mechanization	Mechanization

Thank you

Welcome

to

DELEGATES OF PRIMARY SECTOR MISSION

PRESENTATION OF HORTICULTURE GROUP

TARGETTE GVA AN PRO UCTION FOR 2015-16 AT CURRENT PRICES

Horticulture	2014-15		2015-16		Increase in % GVA
	Prod. (in '000 MTs)	GVA (in Crores)	Prod. (in '000 MTs)	GVA (in Crores)	
Growth Engines					
1.Onion	366465	549.70	399465	583.45	6.1
2.Vegetables	316100	379.32	412100	494.52	30.4
3.Mango	111675	167.51	111675	167.51	0
4.Banana	167775	165.47	287375	285.07	62.27
5.Red Chillies	124935	74.96	147435	91.63	22.24
6.Tomato	75225	45.13	105225	81.13	39.77
TOTAL	1162175	1382.09	1463275	1703.31	
INCREMENT IN GVA					26.78

BEST PRACTICES TO ENHANCE PRO UCTIVITY

Sl. No	Name of the crop	Present productivity (MT / Ha)	Expected productivity (MT / Ha)	Best Practices
1	Mango	9	12	High density plantation, rejuvenation, canopy management, topworking and micro irrigation and fertigation, Soil and leaf analysis
2	Banana	35	50	Use of tissue culture saplings,staking ,IPN/INM and microirrigation and fertigation
3	Red chilles	5	7	Mulching Practice, rip irrigation,IPM/INM
4	Onion	18	20	Usage of hybrid varieties, drip irrigation and fertigation, correct method and right stage of harvesting,proper ventilated storage structure
5	Tomato	20	40	Use of F1 hybrids,semi indeterminate type,trellies,greenhouse/polyhouse /shadenet cultivation,mulching

Promotion of FPOs For Horti.crops

Sl. No	Crop	Number of FPOs	Number of farmers
1	Tomato	4	80
2	Onion	4	80
3	Chillies	4	80
4	Banana	4	80
	TOTAL	16	320

Tomato

District	Area (Ha)	Constraints/Issues	Interventions
Kurnool	2500	Lack of improved varieties, Lack of varieties suitable for processing, Incidence of bacterial wilt, Improper staking, Lack of processing industries, Postharvest losses	Introduction of high yielding varieties; open pollinated varieties suitable for processing; Proper staking and trellising; Protected cultivation; mulching; drip irrigation/fertigation; Integrated Pest Management(IPM) Introduction of fresh produce handling and processing technologies that are compatible with value chain requirements
	2500		

Chilli

District	Area (Ha)	Constraints/Issues	Interventions
Kurnool	500	Improper drying, Aflatoxin contamination, Indiscriminate use of pesticides Susceptibility to Leaf curl virus	Introduction of simple solar dryers and good drying practices Introduction of IPM and other good agricultural practices, Pesticide residue testing, Promotion of varieties resistant to leaf curl virus, suitable for oleoresin extraction, and suitable for rapid drying
	500		

Onion

District	Area (Ha)	Constraints/Issues	Interventions
Kurnool	5000	Lack of improved varieties Low bulb size Improper storage & drying facility Onion blight Poor nursery management	• Introduction of improved varieties, • IPM & Integrated Nutrient Management (INM), • Solar dryers, • Improved handling and storage techniques and facilities
	5000		

Thank You

DEPARTMENT OF AGRICULTURE

JOINT DIRECTOR OF AGRICULTURE
KURNOOL

Double Digit Growth

Action Plan for the year 2015-16

Double Digit Growth

To achieve the "Double Digit Growth" one should . . . . .

- Identify the GAPS which actually hindering to maximize the productivity.

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GROUND NUT

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Strategies to increase Productivity in Important Crops

Productivity Enhancement Interventions	Cost Reduction Interventions
RICE	
1.Promoting High Yielding ,Lodging Resistant ,Pest & Disease resistant varieties Swarna sub1, Samba Mashuri sub 1, Sowbhagya Dhan, CR 1001, MTU 1121	Ensure Optimum Plant Population by Promoting Direct seeding , MSRI (Drum Seeding & Mechanical Transplanting)
2. Use of Micronutrients like zinc , based on Soil Test recommendation for improving soil health & productivity	Large scale Farm Mechanization using rotavators, transplanters, harvesters & Driers
3. Efficient On Field Water Management - Rotational irrigation	Soil Test Based Nutrient application
MAIZE	
1. Use of Micronutrient like zinc, boron	Zero tillage of maize in rice fallows
2. Control of Stem Borer	
3. Special emphasis on baby corn, sweet corn and pop corn varieties	
GROUNDNUT	
1. Popularization of drought tolerant varieties –K9, Dharani , Anantha	Integrated Pest & Disease management
Application of Gypsum & correction of micronutrient deficiencies –zinc, boron	
2. Protective irrigation by effective utilization of scarce water resources through Community sprinklers & farm pond technology	
COTTON	
1. Encouraging High density planting system and mechanical picking of cotton	Soil Test Based Nutrient application
2. Correction of Micronutrient deficiencies – Zinc, Boron & Magnesium	
3. Intercropping of red gram for sustainable returns	

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	GRAND TOTAL	4118.64	4961.68	843.04	20.47

District GVD : 20.47%

Pilot Sites at Kurnool District

Prabhakar Pathak & Team

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Major selection criteria for pilot site

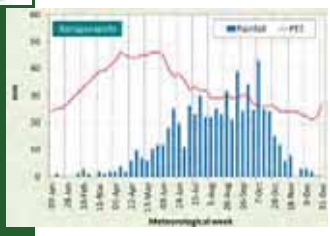
- Representativeness in terms of soils, landscape, rainfall, crops, and socio-economic conditions
- Accessibility
- Willingness to adopt
- Presence of suitable institutions
- Potential for impact

Pilot sites villages in Kurnool district

Devanakonda Mandal, Kurnool

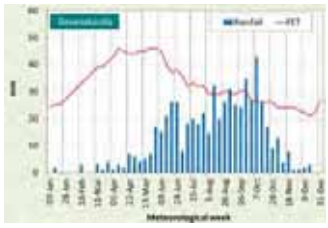
Banaganapalle Mandal, Kurnool

Rainfall and potential evapotranspiration at selected benchmark sites in Kurnool district



Element	Kharif	Rabi	Annual
PET (mm)	646	440	1691
Rainfall (mm)	526	40	643

Banaganapalle mandal,



Element	Kharif	Rabi	Annual
PET (mm)	646	440	1691
Rainfall (mm)	489	37	601

Devanakonda mandal

Meeting with district officials Kurnool, during March & April 2015

Farmers collecting soil samples at pilot sites

Soil sampling at Devanakonda

Soil sampling at Banaganapalle

GPS reading during soil sampling, April 2015

Nutrient status (mean values) at pilot site villages in Devanakonda mandal

Village	Mean values										
	pH	EC	OC	Av P	Av K	Av S	Av Zn	Av B	Avail-Fe	Avail-Cu	Avail-Mn
		dS/m	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Devanakonda	7.49	0.23	0.36	19.68	118.71	9.76	0.75	0.76	7.48	1.20	14.19
K.Venkatapuram	6.71	0.12	0.25	11.77	76.81	5.28	0.41	0.36	8.00	0.52	10.60
Kukatikonda	7.54	0.26	0.25	18.49	99.49	9.47	0.46	0.53	6.28	0.65	9.47
Nelathalamarri	7.66	0.31	0.32	19.40	115.75	10.03	0.45	0.50	6.08	0.69	10.13
Total	7.52	0.26	0.30	18.61	108.66	9.45	0.52	0.55	6.58	0.77	10.82

Percentage of farmers field deficient in soil nutrients at pilot site villages in Devanakonda mandal

Village	% deficient									
	OC	Av P	Av K	Av S	Av Zn	Av B	Avail-Fe	Avail-Cu	Avail-Mn	No of
	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	Samples
Devanakonda	87	2	2	65	57	35	2	0	0	46
K.Venkatapuram	100	12	24	88	88	82	0	53	0	17
Kukatikonda	98	8	5	70	89	67	3	25	0	64
Nelathalamarri	96	8	2	67	91	73	1	25	0	95
Total	95	7	5	69	83	64	2	22	0	222

Production and GVA for Agriculture sector for 2014-15 and 2015-16 at pilot site in Kurnool

Sector	Commodity	2014-15			2015-16			Increase in % GVA
		Area	Production	Gross Value	Area	Production	Gross Value	
		(ha)	(t OR No.)	(Rs Crore)	(ha)	(t OR No.)	(Rs Crore)	
Agriculture	Groundnut	1580	1112	3.991	1580	1400	5.027	25.97
	Bengal gram	700	517	1.730	700	580	1.943	12.31
	Paddy	1221	2540	3.937	1221	2950	4.573	16.14
	Cotton	2471	2008	7.528	2471	2261.5	8.481	12.66
	Sorghum	1138	936	1.592	1138	1160	1.972	23.87
	Pigeonpea	507	224	1.113	507	280	1.392	25.00
	Castor	295	287	1.000	295	335	1.168	16.78
	Black gram	1052	425	2.550	1052	520	3.120	22.35
	Safflower	40	20	0.070	40	23	0.081	15.00
	Sunflower	71	47	0.145	71	54	0.166	14.89
	Millet	67	80	0.105	67	90	0.117	11.43
	Maize	8	30	0.037	8	33	0.041	10.00
	Total	**9150**	**8225**	**23.80**	**9150**	**9687**	**28.08**	**17.99**

Production and GVA for Horticultural and Livestock sectors for 2014-15 and 2015-16 at pilot site in Kurnool

Sector	Commodity	2014-15			2015-16			Increase in % GVA
		Area	Production	Gross Value	Area	Production	Gross Value	
		(ha)	(t OR No.)	(Rs Crore)	(ha)	(t OR No.)	(Rs Crore)	
Horticulture	Onion	272	3568	4.14	304	4500	5.220	26.12
	Chilies	85	323	1.677	94	393	2.042	21.75
	Brinjal	29	283	0.453	32	360	0.576	27.21
	Guar	155	103	0.465	155	120	0.540	16.22
	Lady finger	5	15	0.036	5	17	0.040	12.00
	Ridge gaurd	23	93	0.047	23	115	0.058	23.66
	Coriander	16	3	0.023	16	4	0.026	14.00
	Tomato	93	789	1.105	93	980	1.372	24.16
	Total	**678**	**5177**	**7.94**	**722**	**6488**	**9.87**	**24.30**
Livestock	Milk (MTS)		2197.95	4.84		2665.79	6.05	25.09
	Meat (MTS)		124.34	1.87		143.20	2.15	15.17
	Eggs (Nos in lakhs)		99.5	2.98		119.7	3.59	20.30
	Total			**9.69**			**11.79**	**21.70**
Grand Total				**41.43**			**49.746**	**20.07**

Agriculture - Action Plan

Groundnut

- Application of gypsum & other micronutrients
- Supply of quality seed (K6 or other varieties)
- Broadbed & furrow (BBF) system of cultivation
- Supply of BBF maker cum seed drill
- Training & capacity building of farmers in BBF cultivation
- Supply of crust breaker for better pegging
- Establishment of custom hiring center for farm implements

Vegetable - Action Plan

- Supply of good quality seeds including hybrid varieties of vegetables
- Supply of micronutrients
- Broadbed & furrow system of cultivation
- Supply of shade nets for high value vegetables
- Plant protection equipment's
- Sprinkler & drip irrigation systems
- Provision of post-harvest infrastructure
- Grading & packing facilities
- Supply of improved farm implements
- Promote farmer producer organization (FPO) at the bench mark sites

Livestock - Action Plan

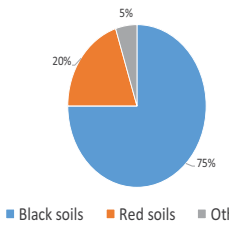
- Supply of good quality feed with better digestibility
- Increase the number of better yielding cattle
- Better feeding practices
- Vaccination of livestock
- Supply of chaff cutters

Media coverage (March 2015)

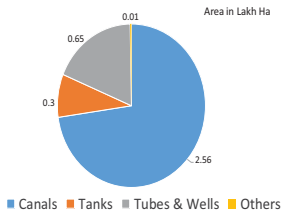
Media coverage (April 2015)

Thank you!

ICRISAT International Crops Research Institute for the Semi-Arid Tropics



Major soils in Kurnool



Major source for Irrigation in Kurnool

Major crops grown in the Kurnool district

- Groundnut
- Rice
- Cotton
- Sunflower
- Pigeonpea
- Sorghum
- Mango
- Banana
- Tomato
- Bengal gram
- Sunflower
- Sorghum
- Cotton
- Onion
- Chilies
- Brinjal

Field visit & meeting with farmers for pilot site selection

Pilot sites in Kurnool

	Site 1	Site 2
Mandal	Banaganapalli	Devanakonda
Watershed	Banaganaapplli	Nallachelimila
Villages	Venkatapuram, Nandavaram, Appalapuram, Pandlapuram, kypa, Sankalapuram	Devanakonda, K.Venakatapuram, Nelathalamarri, Kukatikonda
Area	5099 ha	5100 ha
Soil type	Black soil	Red soil

Maps of Banaganapalli watershed Villages (pilot site)

Banaganapalli
Latitude 15°19′02.44′′
longitude 78° 13′ 32.95′′

Appalapuram
Latitude 15° 20′ 03.27′′
Longitude 78° 15′ 30.82′′

Major crops at Pilot site Devanakonda

- Groundnut
- Cotton
- Castor
- Rice
- Mango
- Chillies
- Vegetables

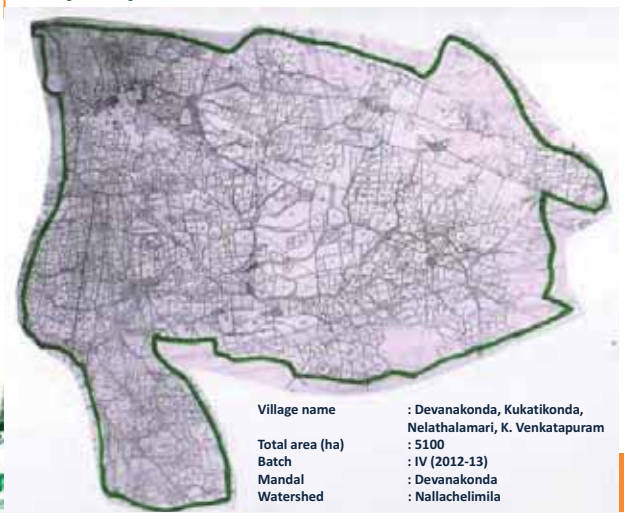
(Onion, Tomato, Brinjal)

Major crops at Pilot site Banaganapalle

- Sorghum
- Rice
- Cotton
- Bengal gram
- Sunflower
- Pigeonpea
- Coriander
- Vegetables
- Horticulture

Explaining about soil health & soil sampling at pilot site villages

Map of pilot site at Devanakonda, Kurnool



Village name	: Devanakonda, Kukatikonda, Nelathalamari, K. Venkatapuram
Total area (ha)	: 5100
Batch	: IV (2012-13)
Mandal	: Devanakonda
Watershed	: Nallachelimila

Welcome
to
DELEGATES OF PRIMARY SECTOR MISSION

PRESENTATION OF FISHRIES GROUP

1

Statement showing INLAND FISH/Prawn production in Kurnool Dist. For the years 2014-15& 2015-16

S No	Total tanks	Total extent (ha)	Inland fish / prawn production (MTS)		No. of Reservoirs	Total extent (ha)	Fish/Prawn production (MTS)		Rivers and Canals (Km)	Total extent (ha)	Fish production (MTS)		Total extent (ha)	Total fish+prawn production (MTS)		% ofInc
			14-15	15-16			14-15	15-16			14-15	15-16		14-15	15-16	
1	173	9713.46	8223	8976	9	66221	14565	15879	845	6000	3095	3385	81934	26017	28375	9.16
						Prawn	124	135								
2											Value in Crores			186.60	231.88	24.3

Statement showing INLAND FISH/Prawn prouction in Kurnool Dist. For the years 2014-15& 2015-16

- **Interventions:**
- Stocking of big size fish seed 80-100mm
- Optimum seed stocking in all reservoirs/ tanks
- Introduction of alternative quick growing varieties like Red Tilapia, Cyprinus and composite culture
- Increase of culture area by cage culture in reservoirs
- Effective implementation of conservation measures i.e Mesh size control, ban period implementation.
- Construction of captive seed rearing ponds.
- De-silting and de-weeding in all water sources

EMENT SHOWING THE MANDAL-WISE PROPOSED FISH UCTION OF KURNOOL DISTRICT FOR THE YEAR 2015-16

Mandal	Name of the Mandal	Expected fish production	Remarks
I. Fisheries Development Officer, Kurnool			
1	Kalluru	19.08	Stocking big size fish seed 80-100 mm
2	Kurnool	8.57	Stocking big size fish seed 80-100 mm
3	Veldurthy	38.94	Stocking big size fish seed 80-100 mm
4	Dhone	55.78	Stocking big size fish seed 80-100 mm
5	Peapully	43.85	Stocking big size fish seed 80-100 mm
6	Orvakal	17.5	Stocking big size fish seed 80-100 mm
	Total:	183.72	Stocking big size fish seed 80-100 mm
II. Fisheries Development Officer, Sunkesula			
7	Gudur	26.262	Stocking big size fish seed 80-100 mm
8	C.Belgal	43.045	Stocking big size fish seed 80-100 mm
9	Nandavaram	16.405	Stocking big size fish seed 80-100 mm
10	Mantralayam	92.713	Stocking big size fish seed 80-100 mm
	Kurnool	513	Sunkesula Reservoir
	Total:	691.425	Introducing Cage Culture and stocking prawn seed
III. Fisheries Development Officer, Nandikotkur			
11	J. Bunglow		Stocking big size fish seed 80-100 mm
12	Nandikotkur	5.225	Stocking big size fish seed 80-100 mm
13	Gadivemula	22.125	Fish culture ponds
14	Miduthuru	1212.25	Srisailam back waters
15 & 16	Pagidyal and Pamulapadu	8265.615	Introducing Cage Culture and stocking prawn seed
	Total:	9505.215	
IV. Fisheries Development Officer, Atmakur.			
17	Atmakur	118.51	Stocking big size fish seed 80-100 mm
18	Veligodu	4400.85	Stocking big size fish seed 80-100 mm stocking prawn seed
19	Kothapalli	27.765	Stocking big size fish seed 80-100 mm
20	Srisailam	8265.8925	Stocking big size fish seed 80-100 mm
	Total:	12813.0175	
V. Fisheries Development Officer, Nandyal.			
21	Nandyal	292.396	Brood Stock Bank and fish culture ponds
22	Panyam	283.176	Construction of active nursery Captive Nursery
23	Mahanandi	84.068	Fish culture ponds
24	B. Atmakur	665.036	Stocking big size fish seed 80-100 mm
25	Kolimigundla	24.465	Stocking big size fish seed 80-100 mm
26	Bethamcherla	2.853	Stocking big size fish seed 80-100 mm
27	Banaganapalli	149.172	Stocking big size fish seed 80-100 mm
28	Owk	688.13	Stocking big size fish seed 80-100 mm
	Total:	2189.296	Stocking big size fish seed 80-100 mm
VI. Fisheries Development Officer, G.D. Project			
29	Krishnagiri	95.26	Stocking big size fish seed 80-100 mm
30	Yemmiganur	27.71	Stocking big size fish seed 80-100 mm
31	Devanakonda	29.91	Stocking big size fish seed 80-100 mm
32	Aspari	35.32	Stocking big size fish seed 80-100 mm
33	Pathikonda	27.06	Stocking big size fish seed 80-100 mm
34	Tuggali	46.13	Stocking big size fish seed 80-100 mm
35	Maddikera	25.42	Stocking big size fish seed 80-100 mm
36	Gonegandla	1280.00	G.D. Project
	Total:	1566.81	Introducing Cage Culture, prawn culture
VII. Asst. Inspector of Fisheries, Allagadda			
37	Sirivella	100.912	Stocking big size fish seed 80-100 mm
38	Rudravaram	424.688	Stocking big size fish seed 80-100 mm
39	Allagadda	68.568	Stocking big size fish seed 80-100 mm
40	Chagalamarri	36.00	Stocking big size fish seed 80-100 mm
41	Uyyalawada	62.00	Stocking big size fish seed 80-100 mm
42	Sanjamala	66.656	Stocking big size fish seed 80-100 mm
	Total:	758.824	Stocking big size fish seed 80-100 mm
VIII. Asst. Inspector of Fisheries, Adoni			
43	Aluru	16.00	Stocking big size fish seed 80-100 mm
44	Adoni	26.30	Stocking big size fish seed 80-100 mm
45	Kowthalam	32.05	Stocking big size fish seed 80-100 mm
46	Halaharvi	30.00	Stocking big size fish seed 80-100 mm
47	Peddakadabur	61.75	Stocking big size fish seed 80-100 mm
48	Kosigi	2.00	Stocking big size fish seed 80-100 mm
49	Chippagiri	2.00	Stocking big size fish seed 80-100 mm

6

Welcome
to
DELEGATES OF PRIMARY SECTOR MISSION

PRESENTATION OF HORTICULTURE GROUP

TARGETTE GVA AN PRO UCTION FOR 2015-16 AT CURRENT PRICES

Horticulture	2013-14		2014-15		2015-16	
	GVA (in Crores)	Prod. (in '000 MTs)	GVA (in Crores)	Prod. (in '000 MTs)	GVA (in Crores)	Prod. (in '000 MTs)
Growth Engines						
1.Chillies	3855	602	4392	732	7320	1220
2.Banana	3017	1888	3166	3166	3666	3666
3.Mango	2148	2348	2188	2736	2674	3344
4.Sweet Orange	1037	1331	1984	1323	2204	1470
5.Cashewnut	716	88	1100	90	1257	214
6.Tomato	3037	3037	3340	3340	3390	3390
7.Oil Palm	604	930	911	1302	979	1400
8.Lemon	974	582	1049	583	1117	621
9.Papaya	880	1545	912	1520	1152	1920
10.Others	17245		16375		18741	
TOTAL	**33513**		**35417**		**42500**	
INCREMENT IN GSDP			**1904**		**7083**	
BUDGET (Rs. in Crore)			219		310	

istrict wise targeted (GVA)in addition to business as usual for 2015-16 (value in crores)

S.No	District	Value (Crores)
1	East Godavari	4546
2	Guntur	3917
3	Ananthapur	3335
4	Kadapa	2054
5	West Godavari	1826
6	Chittoor	1689
7	Kurnool	1531
8	Visakapatnam	1458
9	Krishna	1351
10	Srikakulam	1330
11	Vizianagaram	1040
12	Prakasam	1021
13	Nellore	849
	Grand Total	25947

Crop wise targeted (GVA)in addition to business as usual for 2015-16 (value in crores)

S.No	Crop	Value (Crores)
1	Chillies	4830.00
2	Cashew	4367.40
3	Banana	3729.18
4	Mango	2862.00
5	Tomato	2251.20
6	Coconut	1900.70
7	Sweet orange	1368.00
8	Oilpalm	1152.75
9	Papaya	878.40
10	Turmeric	755.00
11	Brinjal	678.00
12	Onion	664.80
13	Lime	510.00
	Total	25947.43

istrict wise and Crop wise break-up

Sno	Crop	Area	Production	Value in Crores	District
1	Banana	16893	5.91	1075.62	East Godavari
		15685	5.49	999.18	Kadapa
		9760	3.42	622.44	Ananthapur
		6932	2.43	442.26	Guntur
		5819	2.05	373.10	Kurnool
		1732	0.6	109.20	Krishna
		1698	0.59	107.38	Chittoor
2	Brinjal	13433	2.68	536.00	East Godavari
		1987	0.4	80.00	Ananthapur
		1575	0.31	62.00	Vizianagaram
3	Cashew	31758	0.32	38.40	East Godavari
		33989	0.21	25.20	Visakhapatnam
		25230	0.14	16.80	Srikakulam
		18179	0.11	13.20	Vizianagaram
		19231	0.09	10.80	West Godavari

Sno	Crop	Area	Production	Value in Crores	District
4	Chillies	127722	5.75	2875.00	Guntur
		25484	1.15	575.00	Prakasam
		4325	1.08	540.00	Ananthapur
		1900	0.85	425.00	Krishna
		7453	0.33	165.00	West Godavari
		6953	0.31	155.00	Srikakulam
		4421	0.19	95.00	Nellore
5	Coconut	49270	7390	886.80	East Godavari
		20652	3097	371.64	West Godavari
		18645	2796	335.52	Srikakulam
		8700	1305	156.60	Visakhapatnam
		8300	1245	149.40	Vizianagaram
		4090	6.13	0.74	Krishna

Crop wise break-up Contd..

Sno	Crop	Area	Production	Value in Crores	District
6	Lime	17000	2.55	510.00	Nellore
7	Mango	73527	6.62	794.40	Chittoor
		64770	5.83	699.60	Krishna
		39738	3.58	429.60	Ananthapur
		24000	2.16	259.20	Kadapa
		18433	1.66	199.20	East Godavari
		12130	1.09	130.80	Nellore
		10041	0.9	108.00	Srikakulam
		9583	0.86	103.20	Kurnool
		7097	0.63	75.60	Prakasam
		5870	0.52	62.40	Visakhapatnam
8	Oilpalm	71420	8.21	615.75	West Godavari
		28102	3.23	242.25	East Godavari
		13481	1.55	116.25	Krishna
		10476	1.2	90.00	Vizianagaram
		6965	0.8	60.00	Visakapatnam
		3341	0.38	28.50	Srikakulam

Sno	Crop	Area	Production	Value in Crores	District
9	Onion	14466	2.61	313.20	Kurnool
		8930	1.6	192.00	Chittoor
		4735	0.85	102.00	Kadapa
		1478	0.26	31.20	Guntur
		1229	0.22	26.40	Vizianagaram
10	Papaya	7893	6.31	757.20	Ananthapur
		1252	1.01	121.20	Chittoor
11	Sweet orange	55905	7.55	906.00	Ananthapur
		18374	2.48	297.60	Prakasam
		10120	1.37	164.40	Kadapa

Crop wise break-up Contd..

Sno	Crop	Area	Production	Value in Crores	District
12	Tomato	22149	4.43	531.60	Kurnool
		19727	3.95	474.00	Chittoor
		15755	3.16	379.20	Kadapa
		12464	2.49	298.80	Guntur
		9268	1.85	222.00	West Godavari
		66677	1.33	159.60	Vizianagaram
		4735	0.94	112.80	Nellore
		3054	0.61	73.20	Prakasam
13	Turmeric	8975	0.54	270.00	Guntur
		7012	0.42	210.00	Kurnool
		5012	0.3	150.00	Kadapa
		4181	0.25	125.00	Visakapatnam

BEST PRACTICES TO ENHANCE PRO UCTIVITY

Sl. No	Name of the crop	Present productivity (MT / Ha)	Expected productivity (MT / Ha)	Best Practices
1	Mango	9	12	High density plantation, rejuvenation, canopy management, topworking and micro irrigation and fertigation, Soil and leaf analysis
2	Banana	35	50	Use of tissue culture saplings,staking ,IPN/INM and microirrigation and fertigation
3	Papaya	80	100	Usage of gynodioecious lines (Red lady, Surya), IPM/INM, micro irrigation and fertigation
4	Sweet Orange	15	18	Promotion of budlings grafted on rangapurlime,use of certified budwood material,rejuvenation, INM/IPM, micro irrigation
5	Pomegranate	15	20	Use of high yielding varieties, IPM/INM, drip irrigation, mulching, high density plantation
6	Cashew	0.8	1.10	Usage of grafts and high yielding varieties, drip irrigation, mulching, INM/IPM
7	Oilpalm	10	20	Usage of high yielding varieties, micro sprinklers,INM/IPM, micro nutrients
8	Coconut	70 nuts/tree/year	100 nuts/ tree/year	Usage of recommended varieties, drip irrigation,IPM/INM
9	Onion	18	20	Usage of hybrid varieties, drip irrigation and fertigation, correct method and right stage of harvesting,proper ventilated storage structure
10	Tomato	20	40	Use of F1 hybrids,semi indeterminate type,trellies,greenhouse/polyhouse /shadenet cultivation,mulching

Promotion of FPOs For Horti.crops

Sl. No	Crop	Districts &Number of FPOs	Number of farmers	Budget required (Rs in lakhs)
1	Tomato	Kurnool-3 Chitoor-3	6000	240.00
2	Onion	Kurnool-3	3000	120.00
3	Chillies	Guntur-3 Prakasam-3	6000	240.00
4	Banana	Kurnool-3 Ananthapuramu-3	6000	240.00
	TOTAL	21	21000	840.00

Micronutrient intervention for Horti crops

Crop	Gross area (Lakh ha)	MNs targeted (Lakh ha)	Productivity (tons/ha)	Price/tone (Rs)	Addl. yield (t/ha)	Additional value (crore)
Chillies	2.12	**0.636**	5	15000	0.50	48
Tomato	1.67	**0.501**	20	12000	2.00	120
Onion	0.55	**0.165**	18	15000	1.80	45
Banana	0.9	**0.27**	35	25000	3.50	236
papaya	0.19	**0.057**	80	35000	8.00	160
Cashewnut	0.82	**0.246**	1.2	65000	0.18	29
Oilpalm	1.05	**0.315**	12	6500	1.80	37
Mango	3.04	**0.912**	9	20000	1.35	246
Sweet orange	0.98	**0.369**	12	25000	1.80	16
	11.32	3.471	192.2			**936**
Budget required						**Rs.40 to 50Crores**

Tomato

District	Area (Ha)	Constraints/Issues	Interventions
Kurnool	2500	Lack of improved varieties, Lack of varieties suitable for processing, Incidence of bacterial wilt, Improper staking, Lack of processing industries, Postharvest losses	Introduction of high yielding varieties; open pollinated varieties suitable for processing; Proper staking and trellising; Protected cultivation; mulching; drip irrigation/fertigation; Integrated Pest Management(IPM) Introduction of fresh produce handling and processing technologies that are compatible with value chain requirements
Chitoor	2500		
Present value	**5000**	**150 Cr**	**Projected: 300 Cr**

Chilli

District	Area (Ha)	Constraints/Issues	Interventions
Guntur	2500	Improper drying, Aflatoxin contamination, Indiscriminate use of pesticides Susceptibility to Leaf curl virus	Introduction of simple solar dryers and good drying practices Introduction of IPM and other good agricultural practices, Pesticide residue testing, Promotion of varieties resistant to leaf curl virus, suitable for oleoresin extraction, and suitable for rapid drying
Prakasam	2500		
Present value	**5000**	**125 Cr**	**Projected: 225 Cr**

Onion

District	Area (Ha)	Constraints/Issues	Interventions
Kurnool	5000	Lack of improved varieties Low bulb size Improper storage & drying facility Onion blight Poor nursery management	• Introduction of improved varieties, • IPM & Integrated Nutrient Management (INM), • Solar dryers, • Improved handling and storage techniques and facilities
Present value	**5000**	**120 Cr**	**Projected: 150 Cr**

Eggplant (Brinjal

District	Area (Ha)	Constraints/Issues	Interventions
East Godhavari	2500	Fruit & Shoot borer Indiscriminate use of pesticides	• IPM • Mulching & drip irrigation
Vijayanagaram	2500		
Present value	**5000**	**75 Cr**	**Projected: 108 Cr**

INTERVENTIONS TO INCREASE YIEL S OF MAJOR HORTICULTURE CROPS

Sl. No	Crop	Present Yield	Increased yield due to interventions	% of increase	Interventions
1	Cashew	0.7 Tons / Ha	1.0 Ton	40%	Cashew Graft Rejuvenation IPM rip Fertigation Mulching Farm Mechani ation processing units
2	Mango	9 Ton / Ha	12 Ton	30%	High ensity plantation IPM Rejuvenation Canopy Management rip Fertigation
3	Pomegranate	10 Ton / Ha	15 Ton	50%	Good Management Practices IPM Mulching rip Fertigation
4	Banana (T.C)	35 Ton / Ha	50 Ton	42%	T.C. Banana High ensity rip Mulching
5	Papaya	80 Ton / Ha	90 Ton	12%	Viral resistant varieties IPM rip Fertigation
6	Tomato	20 Ton/Ha	150 Ton / Ha	65%	Poly houses Shadenet houses IPM Mulching Fertigation
7	Onion	18 Ton / Ha	20 Ton / Ha		New Varieties rip storage structures value addition onion flakes
8	Other vegetables	12 Ton	18 Ton / Ha		rip Irrigation Fertigation Minimal processing units

E PECTE INCREASES BY THE NEW INTERVENTIONS IN HORTICULTURE CROPS URING 2015-16

Sl. No	Name of the Component	Crop	Area (in Acres)	Yield (per Acre)	Total Yield	Rate / Ton	Total Value (in Crores) (Revenue for one year)
1	Protected Cultivation	Capsicum	300	50 T	15000 T	40,000	60.00
	Poly Houses / Shadenet Houses	Chinese eera	300	4 T	1200 T	15,000	1.80
		H. Tomato	200	60 T	12000 T	10,000	12.00
		Roses	100	7 Lakh (Flowers)	7 Crores	Rs. 4/- Flower	28.00
						Rs. 7/-	49.00 (Export)
	SUB-TOTAL		900				150.80
	Area expansion with Micro Irrigation						
2	Tissue Culture Banana	T.C. Banana	5000	30 T	150000	10,000	150.00
3	Pomegranate	Pomegranate	2000	7 T	14000	55,000	77.00
4	Papaya	Papaya	2000	80	16000	10,000	16.00
5	Cocoa area expansion	Cocoa	10000	1 T	10000	1.5 lakh / Ton	150.00
6	Micro Irrigation	Micro Irrigation	2,50,000 (Acres)	30% in acres	12.5 Tons (increase yield)	20000	25.00
7	Post Harvest Losses	-	210 units (each 5000 MTs Capacity)	30% (Saving)	1.05 Lakh MT (10%)	20000	210.00
8	Vegetable cultivation under pandals, trellies and urban clusters	Vegetables	10,000	25 T	2.5 Lakh MT	20000	500.00
9	Oilpalm	Oilpalm	2.50 Lakhs	20 T	50 Lakh MT	7000	3500.00
	TOTAL						4778.80

istrict wise Crop wise break-up

S.No	District	Crop	Value (crores)
1	Anantapur	Sweet orange	906
		Papaya	757
		Banana	622
		Chillies	540
		Mango	430
		Water melons	136
		Brinjal	80
		Pomogranate	0.3
2	Chittoor	Mango	794
		tomato	474
		Onion	192
		Bhendi	156
		Papaya	121
		Banana	107
3	East Godavari	Banana	1076
		Coconut	887
		Brinjal	536
		Oilpalm	242
		Mango	199
		Cashew	38
		Cocoa	0.9

istrict wise Crop wise break-up contd...

S.No	District	Crop	Value (Crores)
4	Guntur	Chillies	2875
		Banana	442
		tomato	299
		Turmeric	270
		Onion	31
5	Kadapa	Banana	999
		Tomato	379
		Mango	259
		Sweet orange	164
		Turmeric	150
		Onion	102
6	Krishna	Mango	700
		Chillies	425
		Oilpalm	116
		Banana	109
		Coconut	0.7
7	Kurnool	tomato	532
		Banana	373
		Onion	313
		Turmeric	210
		Mango	103

istrict wise Crop wise break-up contd...

S.No	District	Crop	Value (Crores)
8	Nellore	Lime	510
		Mango	131
		tomato	113
		Chillies	95
9	Prakasam	Chillies	575
		Sweet orange	298
		Bhendi	92
		Mango	76
		tomato	73
		Sapota	72
10	Srikakulam	Coconut	336
		Chillies	155
		Pineapple	133
		Mango	108
		Oilpalm	29
		Cashew	17

istrict wise Crop wise break-up contd...

S.No	District	Crop	Value (Crores)
11	Visakhapatnam	Coconut	157
		Turmeric	125
		Coffee	95
		Ginger	95
		Mango	62
		Oilpalm	60
		Cashew	25
12	Vizianagaram	Tomato	160
		Coconut	149
		Oilpalm	90
		Brinjal	62
		Onion	26
		Cashew	13
13	West Godavari	Oilpalm	616
		Coconut	372
		Tomato	222
		Chillies	165
		Cashew	11
		Cocoa	0.5

Thank You

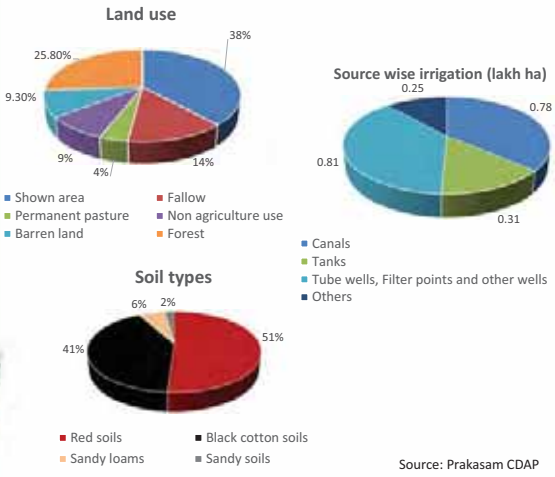
Swarnandhra Vision

A Mission on Primary Sector

Prakasam District AP Primary Sector Team

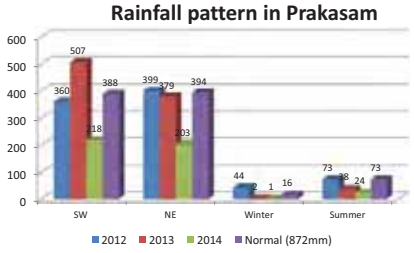
ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Land use pattern, source wise irrigation and soil types in Prakasam district

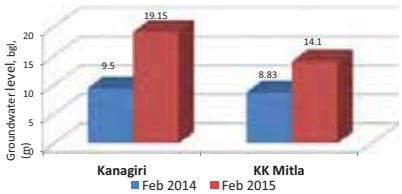


Source: Prakasam CDAP

Rainfall pattern in Prakasam



Effect of last year rainfall on groundwater



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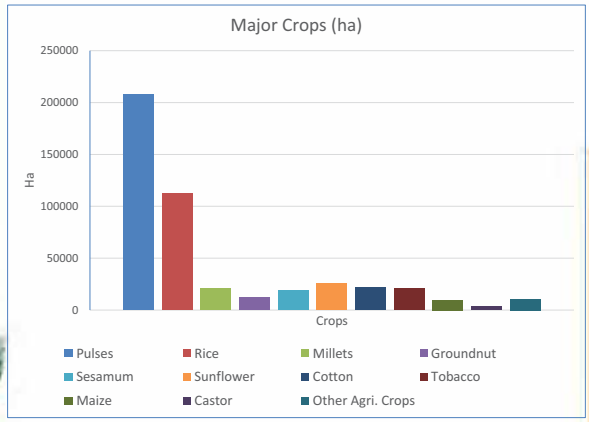
Area coverage under different crops (ha), Prakasam district



Source: Prakasam CDAP

Process Adopted for Sites Selection and Benchmark Characterization in Prakasam

Criteria adopted

- Representative site for the district
- Good potential for impact to bridge the gaps
- Accessibility
- Willingness to adopt new
- Presence of suitable institutions
- Predisposition for change

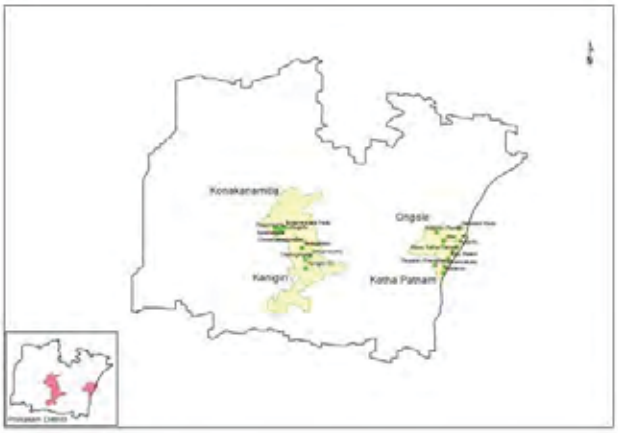
Process

- Stakeholders' consultations
  - District collector
  - CPO
  - JD of all line departments
  - Farmers
- Consultation with all line Departments
  - Mandal level staff of all line departments

Group discussion and field visit for identification pilot sites

Prakasam District Collector conducting meeting with all line department officers

Map of identified Pilot sites, Prakasam district



Pilot sites in Prakasam district

Name of the Mandal	Cultivable Area (ha)	Proposed Crops	Remarks
Konakanamitla (5 Villages) IWMP Ws 2014-15 batch	3976	Blacegram, Cotton, Cowpea, Acid Lime, Sweet Orange, Mango, Chillii, Vegetables, Mulberry	Agriculture, Animal Husbandry, Water sheds, Horticulture Sericulture
Kanigiri (8 Villages) IWMP Ws 2014-15 batch	5941	Redgram, Paddy, Cowpea, Batavia, Mango, Amla, Acid Lime, Guava, Papaya, Vegetables, Mulberry	Agriculture, Animal Husbandry, Water sheds, Horticulture Sericulture
Ongole (5 Villages)	525	In land fisheries	Fisheries
Kothapatnam (11 Villages)	953	In land fisheries	

4 Mandals; 29 Villages; Total cultivable area -11395 ha; IWMP watersheds 2014-15 batch

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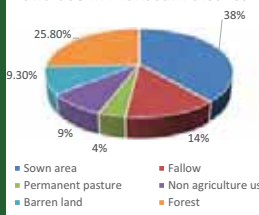
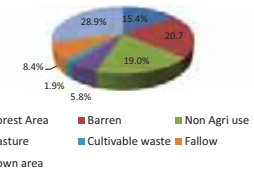
Land use pattern in district and pilot sites

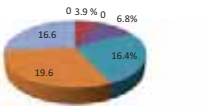
Land use in Prakasam district



Kanigiri



KK Metla



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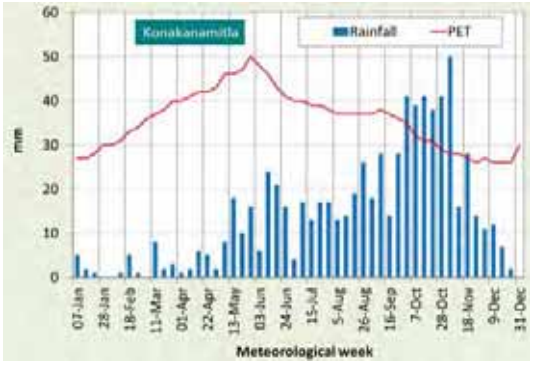
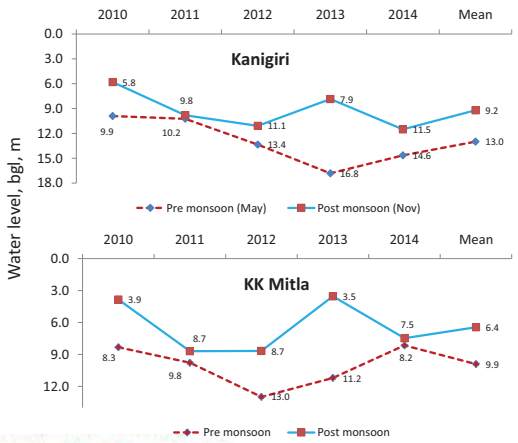
Prakasam district, Konakanamitla mandal



Element	Kharif	Rabi	Annual
PET (mm)	780	675	1860
Rainfall (mm)	489	169	731

Groundwater status in the pilot sites, Prakasam



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Major constraints

Agriculture

- Erratic rainfall
- Water scarcity
- Low crop yields
- Poor soils

Livestock

- Fodder scarcity (particularly green fodder)
- Low livestock productivity

Fisheries

- Non availability of quality fish seeds
- Low survival of rate due to diseases
- No technical support
- Irregular power supply for prawn farming
- Needs to strengthen capacity building program

Horticulture

- Very low area under horticulture and vegetables
- Needs to strengthen capacity building program

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Prakasam district - Pilot site specific growth engines with area (kharif + rabi), production and GVA

Sector	Commodity	2014-15 Area (ha)	2014-15 Production (t)	2014-15 Gross Value (Rs Crore)	2015-16 Area (ha)	2015-16 Production (t)	2015-16 Gross Value (Rs Crore)	Increase in % GVA
Agriculture	o a	18 1	1 0	10.31	1 3	1 5	1 .88	5
	la a	13 1	8	5.15	1 15	101	.30	
	o a	5 8		1. 5	55	3	1.81	5
	a	13 5	5051	8. 3	150	158	10. 8	
	otto	0	518	.10		31	.55	
Horticulture	l	3 .	5	0.00	3 .	1 .8	0.010	0
	a o	13.	1 8	0.003	13.	3 .	0.003	0
	t a	8.8	103	0.0 0	8.8	1 38.	0.0 35	0
Livestock	l	10183	50 1.5	11. 0	10183	3	1 .00	5
	at	388	3	11.0	1	1	13.11	1
	o.	33	13 5 1	. 3		1 0 3	3. 1	5
Fisheries	a	1	8 8	35.11	1	10	3.885	5
Sub Totals								
Agriculture		5865	8360	27.45	6143	10262	33.83	23
Horticulture		122	1824	0.03	122	2189	0.04	20
Livestock (nos.)		10265	6322	24.99	10265	7840	30.53	22
Fishery		219	878	35.11	219	1097	43.89	25
Grand Total		16471	17383	81.31	16749	21388	100.44	24

Interventions

Agriculture

Paddy
- Creating awareness on soil health through soil testing
- Awareness on use of FYM, green manure and organic inputs
- Supply of farm machinery, training on ICM practices and DSR method
- Micronutrient application

Other Rainfed crops
- Improved crop varieties
- Soil test based balanced fertilizer and use of organic and bio fertilizers
- Integrated crop management and in-situ and ex-situ water conservation
- High density planting in cotton

Horticulture
- Improved varieties and grafted fruit plants for higher yield
- Vegetable crops
- Good quality seed
- Efficient water management through drip irrigation
- Encourage to grow high value vegetables in shade nets
- Balanced fertilizer and use of organic and bio fertilizers
- Integrated crop management

Livestock

Milk
- Increase the number of better yielding cattle
- Supply of good quality feed with better digestibility
- Better feeding practices

Meat
- Introduce breeds that produce more meat
- Regular health care of animals
- Rejuvenating garzing land

Egg
- Back yard poultry
- Strengthening support to poultry farms

Fisheries
- Strengthening the participation of officials from Fisheries department and MPEDA
- Strict enforcement of policy on the stake holders to purchase seed from CAA approved hatcheries
- Introduction of improved sp. Like sea bass, thalapia. Etc.
- Proposed for a mobile lab for water quality testing for aqua farmers
- Supply of quality SPF brooder seed

Conclusion

• The pilot area is covered under IWMP 2014-15 batch, planning of watershed interventions for holistic development is critical

• There is a good scope for enhancing the crop yields by 20-30 % through integrated crop management package

• Area under horticultural crops are vey small, there is a good scope to bring in vegetable and suitable horticultural crops with water conservation measures

• Fisheries sector needs to be focused for significant enhancement in the productivity in pilot site mandals of Kothapatnam and Ongole

• Sericulture the new introduction in the pilot area

Thank you

CGIAR

ICRISAT is a member of the CGIAR Consortium

Detailed data used for GVA calculation

Agriculture

a al	Village	Crop	2014-15					Expected improvement in 2015-16				
			Area (ha)	Productivity (t/ha)	Production (t)	MRP (Rs/Q)	GVA (Rs)	Area (ha)	Productivity (t/ha)	Production (t)	MRP (Rs/)	GVA (Rs)
anagiri	all alla	la a	0	0. 5	5 . 5	0	0.351	100	0.		5500	0.3
anagiri	a a a a	la a	10	0. 5	5 . 5	0	1.5	38	0.	315.3	0	1. 8
anagiri	a a	la a	8	0. 5	30	0	0.18	50	0.	3	0	0. 5
onakanamitl a	a a a ala a	la a	5	0. 5	18 .3 5	0	1.151	31	0.	. 8	0	1. 33
onakanamitl a	a a a a	la a	10	0. 5	5 . 5	0	1.5	38	0.	315.3	0	1. 8
anigiri	o o	la a	8	0. 5	. 5	0	0. 5	0	0.	50.	0	0.31
		Black gram	1321		825.625		5.1519	1415		1018.8		6.304032
onakanamitl a	a a all	otto	350	0.	5	050	0.	350	0.85	.5	050	1. 05
onakanamitl a	ala tala	otto	3 0	0.	3	050	1.10	3	0.85	333.	050	1.3
		Cotton	740		518		2.0979	742		630.7		2.554335
anigiri	a a	o a	38	0. 81	18. 8	5500	0.101	0	0.55		5500	0.1 1
onakanamitl a	otla att	o a	510	0. 81	5.31	5500	1.3	51	0.	30 .	5500	1. 0
		Cowpea	548		263.588		1.449734	552		329.2		1.8106
anigiri	all alla	a	3 5	3.	1 0 .5	1 0	.008	35	.1	1 3.	1 0	. 10
anigiri	a a ta	a	50	3.	1 5	1 0	. 81	500	.1	050	1 0	3.
anigiri	o o	a	5 0	3.	183	1 0	3.	50	.1	5	1 0	. 51
		Paddy	1365		5050.5		8.434335	1502		6158.2		10.284194
anigiri	all alla	o a		0.	383.	0 0	.3 3	3	1.1	5.	0 0	.880
anigiri	a a	o a	1 5	0.	130.5	0 0	0. 1	150	1.1	1 5	0 0	1.000
anigiri	a a all	o a	0	0.	8	0 0	3.	50	1.1	8 5	0 0	5.000
anigiri	o o	o a	00	0.	5 0	0 0	3.	00	1.1	0	0 0	.000
		Pigeonpea	1891		1701.9		10.313514	1932		2125.2		12.878712
		Gr. Total	5865		8360		27.45	6143		10262		33.83

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Livestock - Milk

Mandal	Village	Particulars	2014-15				GVA (Rs)	Expected improvement in 2015-16				GVA (Rs)
			Animal Nos.	Productivity (t/year)	Production (t)	MRP (Rs/100kg)		Animal Nos.	Productivity (t/year)	Production (t)	MRP (Rs/100kg)	
							Crores					
a	a a ta	l	304	0.50	15	00	0.33	304	0. 3	1 0	00	0. 18
a	all alla	l	2458	0.50	1	00	. 0	2458	0. 3	153	00	3.380
a	a a	l	726	0.50	3 3	00	0.	726	0. 3	5	00	0. 8
a a	a a all	l	990	0.50	5	00	1.08	990	0. 3	1	00	1.3 1
a a	o o	l	1400	0.50	00	00	1.5 0	1400	0. 3	8 5	00	1. 5
o a a a tla	ala tala	l	266	0.50	133	00	0. 3	266	0. 3	1	00	0.3
o a a a tla	a a a a	l	832	0.50	1	00	0. 15	832	0. 3	5 0	00	1.1
o a a a tla	a a all	l	366	0.50	183	00	0. 03	366	0. 3		00	0.503
o a a a tla	a a a ala a	l	485	0.50	3	00	0.53	485	0. 3	303	00	0.
o a a a tla	otla att	l	2356	0.50	11 8	00	.5	2356	0. 3	1 3	00	3. 0
	Total	Milk	10183		5091.5		11.20	10183		6364		14.00

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Livestock - Meat

Mandal	Village	Particulars	2014-15					Expected improvement in 2015-16				
			Animal Nos.	Productivity (t/year)	Production (t)	MRP (Rs/100kg)	GVA (Rs)	Animal Nos.	Productivity (t/year)	Production (t)	MRP (Rs/100kg)	GVA (Rs)
							Crores					
a	a a ta	at	960			30000	0. 85	1075		11	30000	0.31
a	all alla	at	7403		3	30000	.1	8291		8	30000	. 58
a	a a	at	2504		5	30000	0.	2804		8	30000	0.831
a a	a a all	at	3788		3	30000	1.1 3	4243			30000	1. 5
a a	o o	at	2795		8	30000	0.8 8	3130		31	30000	0. 8
o a a a tla	ala tala	at	696			30000	0. 0	780		8	30000	0. 31
o a a a tla	a a a a	at	3017		30	30000	0.8	3379		33	30000	1.00
o a a a tla	a a all	at	569			30000	0.1	637			30000	0.18
o a a a tla	a a a ala a	at	1088		11	30000	0.3	1219		1	30000	0.3 1
o a a a tla	otla att	at	3783		3	30000	1.1 1	4237			30000	1. 5
a	a a ta	at alo	304		3	30000	0.08	350		3	30000	0.10
a	all alla	at alo	2458			30000	0.	2827		8	30000	0.838
a	a a	at alo	726			30000	0.1	835		8	30000	0.
a a	a a all	at alo	990			30000	0.	1139		11	30000	0.33
a a	o o	at alo	1400		13	30000	0.3 8	1610		1	30000	0.
o a a a tla	ala tala	at alo	266			30000	0.0	306		3	30000	0.0 1
o a a a tla	a a a a	at alo	832			30000	0. 5	957			30000	0. 8
o a a a tla	a a all	at alo	366		3	30000	0.0	421			30000	0.1 5
o a a a tla	a a a ala a	at alo	485			30000	0.131	558			30000	0.1 5
o a a a tla	otla att	at alo	2356		1	30000	0. 3	2709			30000	0.803
a	a a ta	Poultry meat	34		0.2	10000	0.00	39		0	10000	0.00
a	all alla	Poultry meat	3200		19.2	10000	0.1	3680		3	10000	0.3
a	a a	Poultry meat	1887		11.3	10000	0.113	2169		1	10000	0. 1
a a	a a all	Poultry meat	305		1.8	10000	0.018	350		3	10000	0.035
a a	o o	Poultry meat	472		2.8	10000	0.0 8	543		5	10000	0.05
o a a a tla	ala tala	Poultry meat	269		1.6	10000	0.01	309		3	10000	0.031
o a a a tla	a a a a	Poultry meat	520		3.1	10000	0.031	598			10000	0.05
o a a a tla	a a all	Poultry meat	139		0.8	10000	0.008	159			10000	0.01
o a a a tla	a a a ala a	Poultry meat	139		0.8	10000	0.008	159			10000	0.01
o a a a tla	otla att	Poultry meat	139		0.8	10000	0.008	159			10000	0.01
		Meat	43887		397		11.06	49671		491		13.11

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Livestock - Egg

Mandal	Village	Particulars	2014-15				GVA (Rs)	Expected improvement in 2015-16				GVA (Rs)
			Animal Nos.	Productivity (t/year)	Production (t)	MRP (Rs/100kg)		Animal Nos.	Productivity (t/year)	Production (t)	MRP (Rs/100kg)	
							Crores					
a	a a ta		33.5		6700	2	0.013	41.875		8375	2	0.01
a	all alla		3200		640000	2	1. 80	4000		800000	2	1. 00
a	a a		1886.5		377300	2	0. 55	2358.125		471625	2	0. 3
a a	a a all		304.5		60900	2	0.1	380.625		76125	2	0.15
a a	o o		472		94400	2	0.18	590		118000	2	0. 3
o a a a tla	ala tala		268.5		53700	2	0.10	335.625		67125	2	0.13
o a a a tla	a a a a		520		104000	2	0. 08	650		130000	2	0. 0
o a a a tla	a a all		138.5		27700	2	0.055	173.125		34625	2	0.0
o a a a tla	a a a ala a		0		0	2	0.000	0		0	2	0.000
o a a a tla	otla att		910		1091.4	2	0.00	1136.875		1364.25	2	0.003
		Egg	7733		1365791		3	9666		1707239		3.41
		Gr. Total	61803		1371280		24.99	69521		1714094		30.53

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Horticulture

Mandal	Village	Crop	2014-15					Expected improvement in 2015-16				
			Area (ha)	Productivity (t/ha)	Production (t)	MRP (Rs/)	GVA	Area (ha)	Productivity (t/ha)	Production (t)	MRP (Rs/)	GVA
anigiri	all alla		.	15	138	1500	0.00	.	18	1 5.	1500	0.00
anigiri	a		10.	15	15	1500	0.00	10.	18	18 .	1500	0.003
onakanamitla	atrgunta	l	10.	15	15	1500	0.00	10.	18	18 .	1500	0.003
onakanamitla	Garimenpenta	l	.	15	1	1500	0.00	.	18	1 .8	1500	0.003
			39.6		594		0.00891	39.6		712.8		0.010692
anigiri	a a all	Mango	13.2	15	198	1500	0.003	13.2	18	237.6	1500	0.004
anagiri	a a ta	t o a	1.	15	3	1 00	0.00	1.	18	388.8	1 00	0.00
anigiri	a a all	t a	.8	15	3	1900	0.00	.8	18	.	1900	0.008
anigiri	a	t a	.	15	33	1900	0.00	.	18	03.	1900	0.008
		Sweet Orange	68.8		1032		0.019608	68.8		1238.4		0.0235296
		Gr. Total	122		1824		0.031	122		2189		0.038

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Fisheries

Mandal	Village	Particulars	2014-15				GVA (Rs)	Expected improvement in 2015-16				GVA (Rs)
			Area (ha)	Productivity (t/ha)	Production	MRP Rs/t	Crores	Area (ha)	Productivity (t/ha)	Production	MRP Rs/Q	Crores
Kothapatnam	Gundamala	Prawns	5.9	4.0	24	400000	0.946	5.9	5.0	30	400000	1.182
Kothapatnam	Motumala	Prawns	16.3	4.0	65	400000	2.600	16.3	5.0	81	400000	3.250
Kothapatnam	Gadepalem	Prawns	1.3	4.0	5	400000	0.200	1.3	5.0	6	400000	0.250
Kothapatnam	Beeramgunta	Prawns	62.3	4.0	249	400000	9.964	62.3	5.0	311	400000	12.455
Kothapatnam	Kothapatnam	Prawns	7.2	4.0	29	400000	1.144	7.2	5.0	36	400000	1.430
Kothapatnam	Rajupalem	Prawns	9.0	4.0	36	400000	1.440	9.0	5.0	45	400000	1.800
Kothapatnam	Ethamukkala	Prawns	31.5	4.0	126	400000	5.048	31.5	5.0	158	400000	6.310
Kothapatnam	Madanur	Prawns	17.4	4.0	69	400000	2.776	17.4	5.0	87	400000	3.470
Ongole	Koppolu	Prawns	15.6	4.0	62	400000	2.496	15.6	5.0	78	400000	3.120
Ongole	Boddulurivaripalem	Prawns	12.2	4.0	49	400000	1.944	12.2	5.0	61	400000	2.430
Ongole	Devarampadu	Prawns	18.9	4.0	76	400000	3.022	18.9	5.0	94	400000	3.777
Ongole	Gundayapalem	Prawns	11.6	4.0	46	400000	1.853	11.6	5.0	58	400000	2.317
Ongole	Chinthayapalem	Prawns	10.5	4.0	42	400000	1.676	10.5	5.0	52	400000	2.095
			219		878		35.11	219		1097		43.89

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Work plan submitted by line department that needs to be reviewed and finalized

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Agriculture

Mandal & no. of villages	Crops	Area (ha)		Expected benefit
		Existing	Proposed	
Konkanametla (5 Villages)	Cowpea Black gram Cotton	1002	2011	25-30% increase in productivity
Kanagiri (5 villages)	Pigeonpea Cowpea Paddy	3505	5483	

Interventions

- Soil test based balanced fertilization and other improved agricultural practices
- In-situ and ex-situ water conservation
- Efficient water management through drip and sprinklers
- Introduction of suitable crop varieties

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Animal Husbandry

Mandal & no. of villages	Present production (MT)		Expected increase in production (MT)	
	Meat	Milk	Meat	Milk
Konkanametla (5 Villages)	280	142	559	254
Kanagiri (5 villages)	124	104	246	187

Intervention:

- Improve feed quality through concentrated feed and calcium supplement;
- Improve productivity of milch animals and ruminants;
- Improved animal health care; improve fodder availability.

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Horticulture

Mandal & no. of villages	Crops	Area (ha)		Expected benefit
		Existing	Additional Proposed	
Konkanametla (3 Villages)	Acid lime, Sweet orange, Mango, Chilli, Vegetables	57	65	35-40 % increase in productivity.
Kanagiri (5 villages)	Batavia, Mango, Acid lime, Amla, Papaya, Vegetables	140	275	Two fold increase in productivity.

Interventions:

- Introduction of suitable improved variety like encourage farmers to take up acid lime CV
- Balaji selection sweet orange, budded on Rangapur lime, mango veneer grafts
- Shade net cultivation of vegetables with drip irrigation and mulching.

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Fisheries

Mandal & no. of villages	Crops	Area (ha)		Expected benefit
		Existing	Additional Proposed	
Kothapatnam (8 Villages)	In land fisheries	602	350	Increase in the area, productivity and production
Ongole (4 villages)	In land fisheries	274	250	

Interventions:
Increase in in land fisheries area

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Sericulture

Mandal & no. of villages	Crops	Area (ha)		Expected benefit
		Existing	Additional Proposed	
Konkanametla (3 Villages)	Mulberry	Nil	12	3.0-3.6 tons (silk Cocoons)
Kanagiri (5 villages)	Mulberry	Nil	20	3.0-3.6 tons (silk Cocoons)

Interventions:
Bivoltine hybrid rearing, providing equipments like rearing stand, brush, cutters, power sprayers; mulberry cultivation with trenches; construction of model rearing shed, etc.

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Watershed department (DWMA), 2014-15 batch

Sl. No.	Mandal	WS Name	WS area (ha)	No. Micro WS
1	Konakanamitla	Gotlagattu	4817	5
2	Kanagiri	Badaguleru	5467	5
		Total	10284	10

DPR preparation is progress

Minor Irrigation department proposed for 2015-16

Sl. No.	Village (Mandal)	Tank	Ayacut area (ha)	Proposed work
1	Chinamanagundem (KK Mitla)	Dasabandham	64.25	Sluices reconstruction and tank bund repair
2	Gattu vaganna	37.51		-----"-----
3	Koanakana Mitla	Amba	64.25	Tank bund repair
4	Nagampalli	Village tank	32.62	Irrigation channels, surplus weir and tank bund repair
5	Salanutala	34.594		Tank bund repair

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DOUBLE DIGIT GROWTH ACTION PLAN 2015-16

CHITTOOR DISTRICT

I IT T I 015

Growth Engine wise & Farming situation wise particulars: KHARIF

	Crop	FS	Area	Actual Productivity	Target productivity	Present Production in Mtons	Targetted Production in Mtons	Present Growth value in Rs. Crores	Projected Growth value in Rs. Crores	Additional Production Target in Mtons	Additional Growth value in Rs. Crores	% of growth
			(Ha)	(Kg/ha)	(Kg/ha)	7 = (4x5)	8= (4x6)	9= (7xMP)/ 10000000	10= (8xMp)/ 10000000	11=(8-7)	12 = (10-9)	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Groundnut	RF	136479	642	758	87620	103451	438	517	15831	79	18
2	RICE	ID	16655	3399	3850	56610	64122	85	96.18	7512	11.18	13
3	Sugarcane	ID	27915	74887	82376	2090471	2299526	502	551.89	209055	49.89	10
4	Ragi	RF	7290	1326	1591	9667	11598	19	23.2	1931	4.2	20
5	Redgram	RF	8113	300	360	2434	2921	11	12.7	487	1.7	20
6	Maize	RF	1242	3125	3688	3881	4580	5	6.41	699	1.41	18
7	Sunflower	RF	166	651	749	108	124	0.41	0.47	16	0.06	15

Growth Engine wise & Farming situation wise particulars: RABI 2015-16

	2	3	4	5	6	7	8	9	10	11	12	13
1	Groundnut	RF	14092	2727	3327	38429	46884	192	234.42	8455	42.42	22
2	RICE	ID	36338	3470	4126	126093	149931	189	224.9	23838	35.9	19
3	Ragi	RF	752	1639	1970	1233	1481	2	2.96	248	0.96	20
4	Maize	RF	775	5100	6120	3953	4743	6	6.64	790	0.64	20
5	Sunflower	RF	1375	774	913	1064	1255	4	4.71	191	0.71	18

ROLE OF INPUTS AND BUDGET REQUIRED IN GROUNDNUT TO BOOST PRODUCTIVITY

INPUTS REQUIRED TO ENHANCE PRODUCTIVITY IN GROUNDNUT (Rs. In Lakhs)

Sno	Input	Qty	Units	Subsidy	Impact of Input	Cut off date
1	Seed	83000	Qtls	1660	Maintain Optimum Plant population	15.5.2015
2	STC- T.Viride	32600	Kg	24.45	Control Root Rot Disease	15.5.2015
3	Micro Nutrients					
	Zinc Sulphate	3412	Mtons	604	Enhance yield potentiality & energy circulation in the plant	15.5.2015
	Gypsum	68240	Mtons	1063	Increase Kernal Weight & Oil content in the Kernal	15.5.2015
				3352		

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INPUTS REQUIRED TO ENHANCE PRODUCTIVITY IN RICE (Rs. In Lakhs)

SlNo	Input	Qty	Units	Subsidy	Impact of Input usage	cut off date
1	Green Manure	11650	qtls	298	Increase Soil Health & Fertility status	15.5.2015
2	STC- Carbandizm	1249	Kg	6	Control Root Rot Disease	1.6.2015
3	Micro Nutrients					
	Zinc Sulphate	833	Mtons	147	Enhance yield potentiality & energy circulation in the plant & disease resistant	1.6.2015
				451		

I T T I I T T TI IT

INPUTS REQUIRED TO ENHANCE PRODUCTIVITY IN REDGRAM (Rs. In Lakhs)

SlNo	Input	Qty	Units	Subsidy	Impact of Input usage	cut off date
1	High yielding varieties	1200	qtls	23.4	Varietal replacement with LRG 41	15.5.2015
2	STC- Carbandizm	600	Kg	2.8	Control Root Rot Disease	15.5.2015
3	Micro Nutrients					
	Zinc Sulphate	200	Mtons	35.4	Enhance yield potentiality & energy circulation in the plant & disease resistance	15.5.2015
				61.6		

INTERVENTIONS FOR DOUBLE DIGIT GROWTH IN AGRICULTURE - 2015-16

S.No	Intervention	Input	Scheme	% on yield	impact & Cost reduction
Groundnut					
1	Drought Resistant varieties	Dharani / K9	NMOOP	10%	Reduce yield loss due to drought
2	Increase in Seed rate to 150 Kg/Ha		NMOOP	15%	Optimum plant population (33000 plants /Ha)
3	Seed Treatment	T.Viride	NMOOP		reduce cost PP measures
4	Sowing with Seed Drill	Seed drills	F.M		Optimum plant spacing & reduce cost on manual labour, more area in less
5	Water Management	sprinklers	NMOOP	10%	water management during critical periods gives more yields
6	Soil Test based Micro nutrients	Gypsum, Zinc	E A P	20%	Gypsum & Zinc acts on increase in yield, Oil content & weight of the pods
7	Capacity Building		polam pilustondi	10%	Improves the management skills in production, Value addition & marketing knowledge

RICE

1	Green Manuring	Diancha/ S.hemp	O F	15%	Saves nearly Rs.12000/- on Green Leaf Manuring & organic manuring
2	Direct Sowing / SRI/ MSRI	Drum seeders	FM	20%	More productive tillers, low cost method saves upto Rs.5000/- per Ha on transplanting
3	Soil Test based Micro nutrients	Gypsum, Zinc	E.A.P	20%	Zinc Acts as Growth regulator & Gypsum helps in soil reclamation
4	Weedicide application	Butachlor	NFSM	10%	Effective weed management & increase yields
5	High Cost Machinery	reapers, harvestors	FM	10%	Reduce labour cost, time & more area in less time & Employment generation to farmer groups
6	Capacity Building	Pre seasonal, Pre harvesting	pola m pilust ondi	10%	Improves the management skills in production, Value addition & marketing knowledge

Sugarcane

1	Bud chip Plantation			10%	Reduce Seed cost nearly to Rs.15000/- ha
2	Seed Treatment	Carbandazim		5%	Reduce Seed borne diseases & PP measures cost
3	Weedicide application	Atrazin		10%	Effective weed management & increase yields
4	Soil Test based Micro nutrients	Boron, Zinc & iron		20%	Zinc, Iron & Boron application increased cane diameter, length & sucrose %
5	Drip irrigation	drip system		10%	Efficient water Management & increase in production
6	High Cost Machinery	Harvestors		10%	Reduce 60% Manual labour cost & Net returns will be more

Maize

1	Selection of Hybrid seed			10%	Varietal replacement with hybrids giving more yield
2	Narrow spacing			10%	increase plant population & give higher yields
3	Starter fertilizer application	P_2O_5 & K_2O		10%	Placing in close proximity to the seed, gives more yield
4	Soil Test based Micro nutrients	Boron, Zinc & iron	E.A.P	20%	Zinc, Iron & Boron application helps in metabolic action crop growth & yeilds
5	Drip irrigation	drip system		10%	Efficient water Management & increase in production
6	High Cost Machinery	C H Cs	FM	10%	Reduce Manual labour cost, timely operations, more yields

Redgram

1	short duration High yielding drought resistant varieties	LRG 41	NFSM	10%	Varietal replacement with drought resistant varieties give more yield
2	Close spacing			10%	increase plant population & give higher yields
3	Starter fertilizer application	P_2O_5 & K_2O		10%	Placing in close proximity to the seed, gives more yield
4	Soil Test based Micro nutrients	Boron, Zinc & iron	NFSM	20%	Zinc, Iron & Boron application helps in metabolic action crop growth & yeilds
5	water Management	Sprinklers	NFSM	10%	Efficient water Management & increase in production

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ITI

1. R I C E

Raw Rice (Paddy) Market Value : Rs. 14/- per Kg

Processed Rice for cooking Value : Rs. 50/- per Kg

Additional Income to farmer : Rs. 21/- (processing loss Rs. 15/-)

Encourgement of Rice flour Mills to RMGs / Women SHGs

Extraction of Rice bran oil

2. R A G I

Ragi grain market value : Rs. 20/- Kg

Ragi Flour value : Rs. 30/- Kg

Supply of Ragi Ball (Sangati) in MID DAY Meals to school children will give more nutrition compared rice

Training to Women SHGs in preparation of RAGI Biscuits, Ragi Rotis, Ragi Laddu etc. will give more income.

3. GROUNDNUT

Establishment of "PEANUT BUTTER" industry

Groundnut Oil Extraction unit to RMGs for self employment

ACHIEVING DOUBLE DIGIT GROWTH

through

MICRO IRRIGATION

More crop per Drop

Cultivation with Micro Irrigation

CHITTOOR DISTRICT

Contribution of growth engine in terms of Area & Production

a) Impact of Drip Irrigation

Saving in Water – 48 %

Saving in Fertilizer – 34 %

Saving in Power – 33 %

Saving in Labour – 40 %

Source : Agriculture Finance Corporation

b) IMPACT PROPOSED OF AP MI PROJECT–CHITTOOR DISTRICT(during 2015-16)

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Flood Irrigation

rip Irrigation

BU GET RE UIREMENT URING 2015-16 UN ER APMIP

Sl. No.	Name of the Crop	Type of Irrigation	Area proposed	Average Unit cost of the Drip per Ha(Rs.)	Projected Cost (Rs. in Crores)	Govt. Share (Subsidy) (Rs. in Crores)	Yield without Drip/ Sprinkler (Mts/Ha)	Yield With Drip / Sprinkler (MTs/ Ha)	Increase yield (Mts)	Rate per MT (Rs.)	Income generate per Ha (in Rs.)	Income generate overall per one year (Rs. in Crores)	Income for 10 years (life time of Drip) (Rs. in Crores)
1	2	3	4	5	6	7	8	9	10	10	11	12	13
1	Mango	Drip	10000	26692	26.69	21.89	10	13	3	10000	130000	130.00	1300.00
2	Vegetable	Drip	8000	100000	80.00	65.60	20	25	5	5000	125000	100.00	1000.00
3	Mulberry	Drip	500	79603	3.98	3.26	70	82	12	3000	246000	12.30	123.00
4	Sugarcane	Drip	1000	90300	9.03	7.40	100	140	40	2000	280000	28.00	280.00
5	Ground Nut	Sprinkler	500	22528	1.13	0.92	2.5	3	0.5	26000	78000	3.90	39.00
	Total		20000		120.83	99.08					859000	274.20	2742.00

ACTIVITY AND STRATEGIES UNDER GROWTH OF MICRO IRRIGATION

a) MI POTENTIAL WISE ACTION PLAN FOR 2015-16

Sl. No.	Potential Type	No. of Mandals	Traget Proposed						Income generates (Rs. in Crores)					
			Vegetables	Mango	Mulberry	Sugar Cane	Groundnut	Total	Vegetables	Mango	Mulberry	Sugar Cane	Groundnut	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	HIGH	23	5005	3850	265	285	70	9475	62.56	50.05	6.52	7.98	0.55	127.66
2	MEDIUM	21	2005	3275	195	325	115	5915	25.06	42.58	4.80	9.10	0.90	82.43
3	LOW	21	990	2875	40	390	315	4610	12.38	37.38	0.98	10.92	2.46	64.11
	TOTAL	65	8000	10000	500	1000	500	20000	100.00	130.00	12.30	28.00	3.90	274.20

b) Convergence with NREGS :

Sl. No.	Name of the Programme	Area in Ha	Total No. of Man days required
1.	Trench work with NREGS	20000	768897

HIGH MI POTENTIAL MANDALS / MIAO WISE ACTION PLAN FOR 2015-16

Name of the mandal	Name of the MIAO	Traget Proposed						Income generates (Rs. in Crores)					
		Vegetables	Mango	Mulberry	Sugar Cane	Groundnut	Total	Vegetables	Mango	Mulberry	Sugar Cane	Groundnut	Total
2	1	3	4	5	6	7	8	9	10	11	12	13	14
Ramakuppam	Murali	550	25	25	10		610	6.88	0.33	0.62	0.28	0.00	8.10
Santhipuram	Murali	550	25	25	10		610	6.88	0.33	0.62	0.28	0.00	8.10
Kuppam	Jayachandra Reddy	500	25	25	10		560	6.25	0.33	0.62	0.28	0.00	7.47
Gudipalli	Jayachandra Reddy	500	25	25	10		560	6.25	0.33	0.62	0.28	0.00	7.47
V.kota	Sridhar	400	25	40			465	5.00	0.33	0.98	0.00	0.00	6.31
Vayalpadu	Balaji	150	250	10	10		420	1.88	3.25	0.25	0.28	0.00	5.65
Bangarupalem	Kavitha	25	350		25		400	0.31	4.55	0.00	0.70	0.00	5.56
G.D.Nellur	Murali krishna	15	350		25		390	0.19	4.55	0.00	0.70	0.00	5.44
Irala	Murali krishna	15	350		25		390	0.19	4.55	0.00	0.70	0.00	5.44
Molakalacheruvu	Reddy babu	350	50	15			415	4.38	0.65	0.37	0.00	0.00	5.39
PTM	Reddy babu	350	50	15			415	4.38	0.65	0.37	0.00	0.00	5.39
Thavanampalli	Kavitha	25	350		10	10	395	0.31	4.55	0.00	0.28	0.08	5.22
Thamballapalli	Radha krishna	300	50	25			375	3.75	0.65	0.62	0.00	0.00	5.02
Gurramkonda	Balaji	150	200	10	10		370	1.88	2.60	0.25	0.28	0.00	5.00
Chinnagottigallu	Sujathamma	100	225		25		350	1.25	2.93	0.00	0.70	0.00	4.88
Puthalapattu	Murali krishna	25	350				375	0.31	4.55	0.00	0.00	0.00	4.86
B.Kothakota	Nagendra prasad	250	100	15			365	3.13	1.30	0.37	0.00	0.00	4.79
Peddamandyam	Radha krishna	300	50		10	10	370	3.75	0.65	0.00	0.28	0.08	4.76
Penumur	Murali krishna	25	300		15		340	0.31	3.90	0.00	0.42	0.00	4.63
Srikalahasti	Srivastava	25	200		50	40	315	0.31	2.60	0.00	1.40	0.31	4.62
Yerravaripalem	Sujathamma	100	225		10	10	345	1.25	2.93	0.00	0.28	0.08	4.53
Bireddypalli	Sridhar	275	25	25	5		330	3.44	0.33	0.62	0.14	0.00	4.52
Ramachndrapuram	Surendra babu	25	250	10	25		310	0.31	3.25	0.25	0.70	0.00	4.51
Total		5005	3850	265	285	70	9475	62.56	50.05	6.52	7.98	0.55	127.66

MEDIUM MI POTENTIAL MANDALS/ MIAO WISE ACTION PLAN FOR 2015-16

Name of the mandal	Name of the MIAO	Traget Proposed						Income generates (Rs. in Crores)					
		Vegetables	Mango	Mulberry	Sugar Cane	Groundnut	Total	Vegetables	Mango	Mulberry	Sugar Cane	Groundnut	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Gangavaram	Rama chaitanya	200	50	40	10		300	2.50	0.65	0.98	0.28	0.00	4.41
Pileru	Pratheep kumar	50	225		25	10	310	0.63	2.93	0.00	0.70	0.08	4.33
Rompicherla	Sujathamma	100	175		25	10	310	1.25	2.28	0.00	0.70	0.08	4.30
Palamaner	Sridhar	225	25	40	5		295	2.81	0.33	0.98	0.14	0.00	4.26
Chandragiri	Surendra babu	50	250	15			315	0.63	3.25	0.37	0.00	0.00	4.24
Vedurukuppam	Surendra babu	25	250	10	15		300	0.31	3.25	0.25	0.42	0.00	4.23
Sodam	Swarnalatha	100	200		10		310	1.25	2.60	0.00	0.28	0.00	4.13
Somala	Swarnalatha	100	200		10		310	1.25	2.60	0.00	0.28	0.00	4.13
Kurabalkota	Nagendra prasad	200	100	10			310	2.50	1.30	0.25	0.00	0.00	4.05
Pakala	Swarnalatha	50	200		25	10	285	0.63	2.60	0.00	0.70	0.08	4.00
SR puram	Murali krishna	25	200		25	25	275	0.31	2.60	0.00	0.70	0.20	3.81
Punganur	Rama chaitanya	200	50	15	10		275	2.50	0.65	0.37	0.28	0.00	3.80
Pedda panjani	Rama chaitanya	200	50	25			275	2.50	0.65	0.62	0.00	0.00	3.77
Yadamari	Kavitha	15	250		10		275	0.19	3.25	0.00	0.28	0.00	3.72
Puttur	Chengamma	25	200		25	10	260	0.31	2.60	0.00	0.70	0.08	3.69
Vijayapuram	Chengamma	25	200		25	10	260	0.31	2.60	0.00	0.70	0.08	3.69
B.N.Kandriga	Srivastava	25	150		40	30	245	0.31	1.95	0.00	1.12	0.23	3.62
Pitchatur	Chengamma	15	150		50	10	225	0.19	1.95	0.00	1.40	0.08	3.62
Karvetinagar	Chengamma	25	200	10	15		250	0.31	2.60	0.25	0.42	0.00	3.58
Chowdepalli	Swarnalatha	150	100	15			265	1.88	1.30	0.37	0.00	0.00	3.54
Ramasamudram	Rama chaitanya	200	50	15			265	2.50	0.65	0.37	0.00	0.00	3.52
	Total	2005	3275	195	325	115	5915	25.06	42.58	4.80	9.10	0.90	82.43

LOW MI POTENTIAL MANDALS / MIAO WISE ACTION PLAN FOR 2015-16

Name of the mandal	Name of the MIAO	Traget Proposed						Income generates (Rs. in Crores)					
		Vegetables	Mango	Mulberry	Sugar Cane	Groundnut	Total	Vegetables	Mango	Mulberry	Sugar Cane	Groundnut	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
KVP puram	Srivastava Kumar	15	150		40	30	235	0.19	1.95	0.00	1.12	0.23	3.49
Nagalapuram	Srivastava Kumar	15	150		40	30	235	0.19	1.95	0.00	1.12	0.23	3.49
KV palli	Pratheep kumar	150	100			40	290	1.88	1.30	0.00	0.00	0.31	3.49
Chittoor	Kavitha	15	200	10	15		240	0.19	2.60	0.25	0.42	0.00	3.45
Gudipala	Kavitha	25	200		15	10	250	0.31	2.60	0.00	0.42	0.08	3.41
Satyavedu	Srivastava Kumar	25	150		35	15	225	0.31	1.95	0.00	0.98	0.12	3.36
Nindra	Chengamma	15	150		40	10	215	0.19	1.95	0.00	1.12	0.08	3.34
Pulicherla	Swarnalatha	50	200			10	260	0.63	2.60	0.00	0.00	0.08	3.30
Kalakada	Pratheep kumar	150	100			15	265	1.88	1.30	0.00	0.00	0.12	3.29
Kalikiri	Pratheep kumar	150	75	10		15	250	1.88	0.98	0.25	0.00	0.12	3.21
Thottambedu	Srivastava Kumar	15	150		25	40	230	0.19	1.95	0.00	0.70	0.31	3.15
Nagari	Chengamma	25	150		25	10	210	0.31	1.95	0.00	0.70	0.08	3.04
Narayanavanam	Chengamma	25	150		25	10	210	0.31	1.95	0.00	0.70	0.08	3.04
Palasamudram	Murali krishna	10	150		25	15	200	0.13	1.95	0.00	0.70	0.12	2.89
Yerpedu	Srivastava Kumar	15	125		25	40	205	0.19	1.63	0.00	0.70	0.31	2.82
Madanapalli	Nagendra prasad	100	100	10			210	1.25	1.30	0.25	0.00	0.00	2.80
Nimmanapalli	Nagendra prasad	100	100	10			210	1.25	1.30	0.25	0.00	0.00	2.80
Varadaiahpalem	Srivastava Kumar	15	125		25	25	190	0.19	1.63	0.00	0.70	0.20	2.71
Vadamalapeta	Surendra babu	25	150		15		190	0.31	1.95	0.00	0.42	0.00	2.68
Renigunta	Surendra babu	25	100		25		150	0.31	1.30	0.00	0.70	0.00	2.31
Tirupati rural	Surendra babu	25	100		15		140	0.31	1.30	0.00	0.42	0.00	2.03
	Total	990	2875	40	390	315	4610	12.38	37.38	0.98	10.92	2.46	64.11

CONSTRAINTS & GASPS - Requirement of Suffort

I. Climate Change

a. Internal change : T t a o ot ta a o t t o tt l tato a
ta o a tot ta o alt l tato o t o a .

b. External change : T o t ot lt t l o a a atta t
o l tl o tt a ta l tato o t o a

II. Risk Factors

1. a o al o to .
. o o ll
3. alt o t at .

Statement of Percentage of growth and GVA

a. Present Status :

Area for increase in yield (in Ha)			Projected Area (in Ha)	
2013-14	2014-15	% of growth	2015-16	Expected growth rate
72174.18	6169.06	18	20000	28 %

b. Existing Activities :

Sl.No.	Name of the Programme	Area in (ha)	Estimated Cost (in crores)	Income generate overall per one Year (Rs. in Crores)	Income for 10 years (life time of rip) (Rs. in Crores)
1	Micro Irrigation	78343.24	378.55	1045.32	10453.15

Healthy Horticulture for wealthy Chittoor

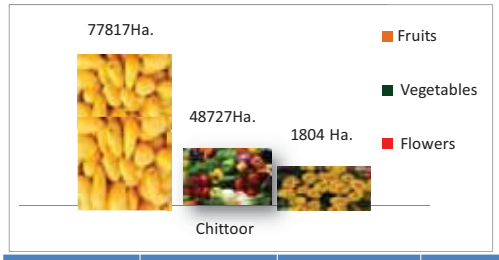
Transforming Chittoor as Horticulture HUB

Refining
Defining
Redefining

Innovation Makes The Land Bloom

TOWARDS DOUBLE DIGIT GROWTH IN HORTICULTURE SECTOR, CHITTOOR DISTRICT

Total area under horticulture : 1,11,405 Hac.



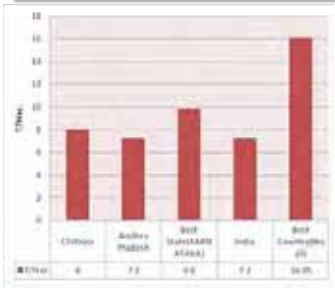
Production
597360 MT
861825 MT
9327 MT

Production 2014-15 (Mts)	Estimated production 2015-16(Mts)	Estimated % of increase	Estimated addl income generation (cr)
14,68,512	1871385 + 3.9 crore stems	27%	781.64

Impact of interventions (schemes) being implemented by the epartment under MI H/R VY/STATE PLAN during the year 2014-15

Name of the intervention (Scheme)	Area covered during 2014-15	Production before interventions (Tonnes)	Increased Production after intervention (Tonnes)	Estimated addl. Production (Tonnes)	Estimated addl. Value generation (In Crors)
a a o T a a a	1. 0	11 .00	13 1.00	1 .00	0. 3
a a o a o	.3	3 .8	5111.88	3 .0	0.3
a a o a a a	1 .00	10 .00	11 8.00	8 .00	0.08
ato a o	501.00	008.00	5010.00	100 .00	.00
a o a a t a o	31 .	158 8.80	0 8.	.	.5
l	18 .80	.80	10138.50	13. 0	.
l l	50.00	8300.00	00.00	1300.00	. 0
a o	.00	0.00	1 0.00	80.00	0.08
o	3.00	0.00	10.00	150.00	0. 0
	53.00	0.00	3000.00	3000.00	. 0
al o	50. 0	03. 0	1 55.00	351. 0	0.35
T ll To ato	183.00	588.00	150.00	5 .00	5.1
lo lt	3 .00	.00	.00	.00	0.30
TOTAL	5146.50	50724.04	67098.82	16374.78	28.31

Productivity status of MANGO



Exports: 1,20,657 tonnes of Mango Pulp and Mango concentrate (2013-14)

PRODUCTIVITY STATUS OF TOMATO

Exports: 23,798 tonnes of Tomato pulp and paste(2013-14)

MANGO - Interventions proposed for enhancement of production of Mango during the year 2015-16

Name of the intervention	Proposed area in Ha	Govt. assistance required(cr)	Present production (tonnes)	Estimated increased production	Estimated addl. Production	Addl. Income generation (cr)
Canopy management	5645	3.387	39515	47982.5	8467.5	8.46
Rejuvenation	4520	9.04	31640	42940	11300	11.3
INM/IPM practices	4000	0.48	32000	38000	6000	6
Micro irrigation	6000	13.67	42000	60000	18000	18
		26.577				**43.76**

Estimated Double Digit Growth rate for Mango

Present Production during 2014-15	GVA during the year 2014-15(cr)	Estimated addl. Production with the interventions of the govt.	Estimated prod. Due to addl. Area comes to bearing stage in 15-16	Total estimated increase in production (2015-16)	Total estimated prod. During the year 15-16	Estimated GVA(cr) 2015-16		Addl. Income generation
3,73,737	1336	43,768	1,19,000	1,62,786	5,36,523	Production	804	
						Processing	965	
						Exports	14.75	
							1784	**448**

TOMATO - Interventions proposed for enhancement of production of Tomato during the year 2015-16

Name of the intervention	Proposed area in Ha	Govt. assistance required(cr)	Present production (tonnes)	Estimated increased production	Estimated addl. Production	Addl. Income generation(cr)
INM	500	0.06	17500	20000	2500	2.5
Micro irrigation	4000	39.91	100000	140000	40000	40
Trellies	9000	1.6	22500	31500	9000	9
Veg. seed	2000	0.6		80000	30000	18
		42.17			**81500**	**69.5**

Estimated Double Digit Growth rate for Tomato

Present Production during 2014-15	GVA During the year 2014-15(cr)	Estimated addl. Production with the interventions of the govt.	Addl. Prod due to capacity building to farmers	Total estimated increase in production (2015-16)	Total estimated prod. During the year 15-16	Estimated GVA (cr) 2015-16		Estimated Addl. Income generation 2015-16(cr)
532629	**532**	81,500	25,000	1,06,500	**6,39,129**	Production	614	
						Processing	256	
						Total	**870**	**182**

Growth Engines contributing estimated Double Digit Growth in Horticulture Sector for the year 2015-16

Name of the crop	Component	Total Area 2014-15	Total production during 2014-15 (tones)	Total GVA(cr) in 2013-14	Expected addl. Area in 2015-16	Expected addl. Production 2015-16	Total Estimated production during 2015-16	Estimated GVA 2015-16 (cr)	Estimated Addl. Income generation 2015-16
1.Mango	a. Production	74204	373737	566.55	13223	162786	536523	804	238
	b. Processing		153000	765		40000	193000	965	200
	c. Exports		1006	4.75		2000	3006	13.75	10
2.Papaya	Production	741	38982	135.21	622	40644	79626	172.2	37
3.Banana	Production	966	28446	54.47	186	6838	35284	68.07	14
4. Other fruits	Production	216	2189	7.7	549	5212	7401	36.78	29
5. Tomato	production	19727	532629	532	2030	81500	614129	614	82
	processing		39,000	156		25000	64000	256	100
6.Other Vegetables	Production	29000	290000	261	1894	33881	323881	291	30
	Export		196	2		500	696	5.5	3.5
7.Flowers	Loose Flowers	1157.5	9327	61.55	436	4512	13839	84.69	23.14
	Cut flowers	1	15 lakhs stems	0.6	25	3.75 crore stems	3.9 crore stems	15	15
	Total	12601.5	1468512	2546.23	18965	402873 + 3.75 crore stems	1871385+ 3.9 crore stems	3326	781.64

Reasons for improvement of productivity and additional income generation

- o t a 13 3 a o a a a o o to a ta t a 01 15
- 00 a o a to al a a a o t o ato o o t lt o t a 01 15 a 10000 a o a l. a ll o t a 015 1
- ato a a o a a t at a a o t o a o a a a o 000 a o o t o o t t o a o
- a ato o t a o t a o a o alt o to o t a tal
- l a t o to o al a o t o t a o to t a tal .
- o oto o a t al la al o o to o ta l
- o oto o lo a al tal o .

Proactive steps for production enhancement:

Climate change with in department and in support institutes

a. Making all the human resources as stake holders in achieving DDG
b. Changing the attitude of the staff into ascertain mode for enhancement of production and income generation through effective transfer of technology.
c. Creating awareness on Hi-tech Horticulture , value addition through exposure visits workshops and interactions with other partners of Horticulture sector.
d. Involving YSR University, KVKs and other regional research institutes for regular diagnostic visits to the fields and expert advice on area specific suitable high yielding varieties for achieving higher productivity

ACTION PLAN FOR ACHIEVING DOUBLE DIGIT GROWTH IN MANGO

Potantional Center/ Horticulture Officer	Mandals	Mango Additional Area (Bearing Stage)	Estimated Additional Production (Mts)	Interventions Proposed
a a al	a a al T. . all a l ala	0	815	Canopy Management, INM/IPM, Mulching and Drip Irrigation
ttoo	ttoo ala a a a a t ala att	1005	0 5	
a	a a a a a a a a a	00	300	
a a a all	a a a all a a all a a a a	515	35	
a l	a a all	0	10	
a ll at a t a	a a a a a t a	5	55	
. ota	. ota a all a ala a	30	5 0	
o all	o all a o a o ala	35	5 15	
T a alla all	T a alla all a a a a a ala ota	5 5	5085	
ola ala	ola ala . ot a ota a T	585	5 5	

Potantional Center/ Horticulture Officer	Mandals	Mango Additional Area (Bearing Stage)	Estimated Additional Production (Mts)	Interventions
. . llo	. . llo . . a a ala a a	850	50	a o a a t l l l a l ato
T at	a a ala ta taa . . a	5	5 5	
at a	at a a a aa al a ala a t at a a	580	5 0	
tt	tt a a a a a a a a a a a t a a a	81	1	
a a	a a a ala l la a a	103	351	
ll	ll . . all a ala a a	0	3 3	
ala a t	ala a t . . a a T otta . . . a a	585	5 5	
. . all	. . all o laa . . al	0	8 30	
al a	al a a o aa al	0	5 0	
	TOTAL	13223	119007	

ACTION PLAN FOR ACHIEVING DOUBLE DIGIT GROWTH IN PAPAYA

Potantional Center/ Horticulture Officer	Mandals	Papaya Additional Area	Estimated Additional Production (Mts)	Interventions
Bangarupalem	Bangarupalem, T.V. Palli and Irala	0	130	a a o t l a t l T a a l ia l ato a t ato
Chittoor	Chittoor, Gudipala, Yadamari and Puthalapattu	0	130	
Punganur	Punganur, Peddapanjani and Gangavaram	30	1 1	
Madanapalle	Madanapalle, Nimmanapalli and Ramasamudram	100	535	
uppam-I	uppam and Gudipalli	5	8	
uppam-II (Santhipuram)	Ramakuppam and Santhipuram	0	5 5	
V. ota	V. ota, Baireddipalli and Palamaner	5	8	
Chowdepalli	Chowdepalli, Sadom and Somala	5	33 8	
Thamballapalli	Thamballapalli, Peddamandyam and urabalakota		18 5	
Molakalacheruvu	Molakalacheruvu, B. othakota and PTM	5	8	
G. .Nellore	G. .Nellore, S.R. Puram, Penumuru and Palasamudram	0	130	
Tirupathi	Vadamalapeta, Renigunta and R.C. Puram	5	3	
Chandragiri	Chandragiri, Pakala, Pulicherla and Vedurukuppam		1	
Piller	Piller, .V. Palli and alakada	1	1	
C.G. Gallu	C.G. Gallu, Rompicherla and Y.V. Palem	10	5	
Valmikipuram	Valmikipuram, Gurramkonda and alikiri	5	1 3	
	TOTAL	622	40648	

ACTION PLAN FOR ACHIEVING DOUBLE DIGIT GROWTH IN BANANA

Potantional Center/ Horticulture Officer	Mandals	Banana Additional Area	Estimated Additional Production (Mts)	Interventions
a a al	a a al T. . all a l ala		5	
ttoo	ttoo ala a a a a t ala att		3	
a ll at a t a	a a a a t a	5	1 55	a a o t l a t a a T lt l ato
. ota	. ota a all a ala a	100	3	
. . llo	. . llo . . a a ala a a		5	
ll	ll . . all a ala a a		331	
	TOTAL	195	7170	

ACTION PLAN FOR ACHIEVING DOUBLE DIGIT GROWTH IN OTHER FRUITS

Potentional Center/ Horticulture Officer	Mandals	Other Fruits Additional Area (Ha.)	Additional Production (Mts)	Interventions
a a al	a a al T. . all a l ala	3	3 3	
ttoo	ttoo ala a a a a t ala att		8	
a	a a a a a a a a a	5	513	
a a a all	a a a all a a all a a a a	0	380	
a l	a a all	1	1 1	
a ll a t a	a a a a t a		8	
. ota	. ota a all a ala a	3	3	
T a alla all	T a alla all a a a a a ala ota	3	3 3	o a o l la a a a a l t . ato
ola ala	ola ala . ot a ota a T		0	
. . llo	. . llo . . a a ala a a	1	38	
T at	a a ala ta taa . . a	0	1 0	
at a	at a a a a a al a ala a t at a a		5	
tt	tt a a a a a a a a a t a a a	1	1 1	
a a	a a a ala l la a a	33	313	
ll	ll . . all a ala a a	18	1 1	
ala a t	ala a t . . a a T otta . . . a a	15	1	
. . all	. . all o la a . . al	1	180	
al a	al a a o a a al		8	
	TOTAL	549	5212	

ACTION PLAN FOR ACHIEVING DOUBLE DIGIT GROWTH IN TOMATO

Sl. No	Potentional Center/ Horticulture Officer	Mandals	Tomato Additional Area (Ha.)	Additional Production (Mts)	Interventions
1	a a al	a a al T. . all a l ala	3	18	
	ttoo	ttoo ala a a a a t ala att	35		
3	a	a a a a a a a a a	1 1	31 5	
	a a a all	a a a all a a all a a a a	05	3	
5	a l	a a all	0	1	l o ta l o 50 T ll t l l o t to o ol o t 50 ato t ato a l
	a ll at a t a	a a a a a t a	8	1	
	. ota	. ota a all a ala a	0	3 8	
8	o all	o all a o a o ala	1 8	8	
	T a alla all	T a alla all a a a a a ala ota	1 5	3 85	
10	ola ala	ola ala . ot a ota a T	3	3 8	
11	. . llo	. . llo . . a a ala a a	5		
1	a a	a a a ala l la a a		1 35	
13	ll	ll . . all a ala a a	35	5 1	
1	. . all	. . all o la a . . al	1	5	
15	al a	al a a o a a al	05	3	
		TOTAL	2030	39400	

ACTION PLAN FOR ACHIEVING DOUBLE DIGIT GROWTH IN OTHER VEGETABELS

Potantional Center/ Horticulture Officer	Mandals	Other Vegetables Additional Area (Ha.)	Additional Production (Mts)	Interventions
a a al	a a al T. . all a l ala	5	805	
ttoo	ttoo ala a a a a t ala att	8	1	
a	a a a a a a a a a	1 5	5	
a a a all	a a a all a a all a a a a	0	3	
a l	a a all	1 8	0	
a ll at a	a a a a t a		1 1	l o ta l o 50 to o a t a al l l ol o t 50 l ato
. ota	. ota a all a ala a	81	1	
o all	o all a o a o ala	115	05	
T a alla all	T a alla all a a a a a ala ota	18	33 5	
ola ala	ola ala . ot a ota a T	1	31	
T at	a a ala ta taa . . a		51	
tt	tt a a a a a a a a a t a a a		11 5	
a a	a a a ala l la a a		1	
ll	ll . . all a ala a a	1 1	880	
. . all	. . all o la a . . al	108	1 3	
al a	al a a o a a al	1	5	
	TOTAL	1894	33881	

ACTION PLAN FOR ACHIEVING DOUBLE DIGIT GROWTH IN FLOWERS

Potentional Center/ Horticulture Officer	Mandals	Flowers Additional Area (Ha.)	Additional Production (Mts)	Interventions
LOOSE FLOWERS				
a a al	a a al T. . all a l ala	0. 0		o o o 50 o a a o l ato l
a	a a a a a a a a a	.00	3	
a a a all	a a a all a a all a a a a	33.00	3	
a l	a a all	8 .00	8 0	
a ll at a	a a a a t a	50.00	518	
. ota	. ota a all a ala a	.00	8	
o all	o all a o a o ala	1 .00	1	
T a alla all	T a alla all a a ala ota	50.00	518	
T at	a a ala ta taa . . a	35.00	3	
at a	at a a a a a al a ala a t at a a	8. 0	501	
tt	tt a a a a a a a a a t a a a	15.00	155	
a a	a a a ala l la a	.00		
ala a t	ala a t . . a a T otta	0.		
al a	al a a o a a al	.00	35	
	TOTAL	436.00	4513	
CUT FLOWERS				
a l	a a all	.00	13 000000	o t to o ol o t 50 o t a t a t a o t ato t ato l l l
a ll at a t a	a a a a t a	18.00	108000000	
	TOTAL	40.00	240000000	

Requirement of financial assistance from the Govt.

S.No	Name of the Growth Engine	Addl. Area proposed for improvement of productivity	Requirement of Financial assistance from the Govt.(Cr)
1	a o l l	01 5	.5
	To ato l l	15500	.1
3	a a a l l	100	0. 3
	a a a l l	150	1.5
5	t t	150	0. 5
	t ta l l l	350	3.15
	lo	300	3. 0
8	t lo	5	11.5
Total		36740	89.277

MARKETING VISION

• Produce what consumer wants
•Participation of national institutes like IIHR, National Horticulture Board, APEDA, NABARD and NIPHM for quality production and financial support to the Horticulture sector.
•Strengthening of back ward linkages with a market oriented approach
•Creation of post harvest technology facilities in a large scale at production points
•Promotion of crops specific growers associations for direct online marketing
•By developing the consortium a grower, processor, exporters and proper planning in advance on the basis of demand of markets

GROWTH BREAKERS

- Depletion of ground water table
- Lack of sufficient post harvest technology infrastructure and marketing intelligence.
- Severe fluctuations in prices of vegetables during the glut period
- Insufficient extension officers to cater the technological needs of the farmers

CHITTOOR DISTRICT PRIMARY SECTOR CONTRIBUTION FOR THE DOUBLE DIGIT GROWTH

S.no	Name of the Department	Projected Growth(%)	Income Generated (in Crs)
1	Agriculture	16	228
2	Horticulture	27	781
3	AP MIP	28	274
4	Livestock & Dairy	16.5	624
5	Fisheries	30	6.1
	TOTAL	23.5	1913.1

Andhra Pradesh Micro Irrigation Project (APMIP) ANANTAPURAMU

Subsidy Pattern for 2014-15:

- ✓ All SC / ST Farmers under SF and MF category are eligible for 100% subsidy on the MI system unit cost, upto a maximum of Rs.1.00 Lakh per family, subject to a maximum of 5 acres, whichever is less.
- ✓ All Other Small and Marginal Farmers are eligible for 90% subsidy on the MI system unit cost, up to a maximum of Rs.1.00 Lakh, per family, subject to a maximum of 5 acres, whichever is less.
- ✓ Farmer with holdings up to 10 acres are eligible for 90% subsidy, up to a maximum of 1.00 Lakhs per family, subject to a maximum of 10 acres, whichever is less.
- ✓ Farmers with holdings above 10 acres are eligible for 50% subsidy, up to a maximum subsidy of Rs.1.00 lakh on the MI system unit cost, per family, subject to a maximum of 12.5 acres, whichever is less.

APMIP in Ananthapuramu District.

Year wise Achievement from 2003-04 to 2014-15

Sl.No.	Year	rip			Sprinkler			Total		
		Physical		Financial (In Lakhs)	Physical		Financial (In Lakhs)	Physical		Financial (In Lakhs)
		No Units	Area Ha	Subsidy	No Units	Area Ha	Subsidy	No Units	Area Ha	Subsidy
1	2	3	4	5	6	7	8	9	10	11
1	2003-04	733	1123	145	7280	11431	328	8013	12554	473
2	2004-05	3939	6663	855	4897	5792	465	8836	12455	1320
3	2005-06	8542	11120	3736	3711	5500	307	12253	16620	4043
4	2006-07	8972	12500	3685	4197	6000	392	13169	18500	4077
5	2007-08	12509	16079	4597	5223	7100	599	17732	23179	5196
6	2008-09	13292	14556	4084	6742	6992	705	20034	21548	4789
7	2009-10	16705	14400	7346	7179	7250	988	23884	21650	8334
8	2010-11	10311	10902	4286	9398	9400	1278	19709	20302	5565
9	2011-12	6128	7020	3674	3807	3807	506	9935	10827	4180
10	2012-13	5302	5802	4083	113	146	38	5433	5948	4121
11	2013-14	7360	7810	5757	-	-	-	7360	7810	5757
12	2014-15	7912	8548	6685	-	-	-	7912	8548	8218
Total		101705	116523	48933	52547	63418	5606	154270	179941	54540

CROP WISE WATER REQUIREMENT FOR HORTICULTURE CROPS IN THE DISTRICT

S.No.	Name of the Crop	Area in Ha.	Peak Water Requirement (mm/day)	Water Use (M^3 / Acre)		Total Water Requirement by surface irrigation in TMC	Total Water Requirement by Drip irrigation in TMC	% Of Saving
				Surface	Drip			
1	Citrus	37759.14	3.00	6640.00	2560.00	22.39	8.63	61.45
2	Mango	8012.52	2.30	5100.00	3324.00	3.65	2.38	34.82
3	Sapota	6302.48	2.30	5100.00	3324.00	2.87	1.87	34.82
4	Pomegranate	3768.04	4.90	3920.00	2196.00	1.32	0.74	43.98
5	Guava	2111.06	3.50	6400.00	5200.00	1.21	0.98	18.75
6	Arecanut	622.96	4.00	5400.00	3250.00	0.30	0.18	39.81
7	Ber	572.90	3.30	2800.00	1800.00	0.14	0.09	35.71
8	Grapes	284.72	5.50	3520.00	2320.00	0.09	0.06	34.09
9	Other fruits	349.00	3.00	5100.00	3324.00	0.16	0.10	34.82
10	Banana	13814.66	6.60	7040.00	3880.00	8.68	4.79	44.89
11	Papaya	10175.87	6.00	9120.00	2920.00	8.29	2.65	67.98
12	Vegetables	14152.00	8.00	1901.00	1007.00	2.40	1.27	47.03
13	Muskmelon	6340.89	6.00	1680.00	1000.00	0.95	0.57	40.48
14	Watermelon	1331.92	6.00	1680.00	1000.00	0.20	0.12	40.48
15	Cucumber	547.18	6.00	1680.00	1000.00	0.08	0.05	40.48
16	Ground Nut (M.Sprinkler)	1185.72	6.00	2620.00	1680.00	0.28	0.18	35.88
17	Mulbery	313.61	5.00	6400.00	5200.00	0.18	0.15	18.75
18	Flowers	156.00	8.00	1562.00	1040.00	0.02	0.01	33.42
19	Other Crops	167.00	6.00	1708.00	980.00	0.03	0.01	42.62
Drip Total		107967.66	95.40			53.23	24.83	53.35
20	Groundnut (Sprinklers)	63424.78	6.00	2620.00	1680.00	14.84	9.51	35.88
Grand Total		*171392.4*	*101.40*			*68.07*	*34.34*	49.54

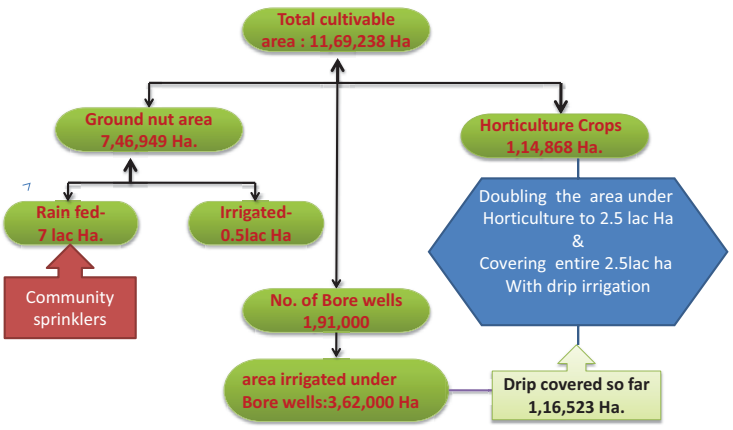
✓Total water being utilized for per year for the crops covered under Drip – **34.34 TMC**
✓Total water required if it is with surface irrigation – **68.07 TMC**
✓Because of judicial usage of water from bore wells by drip the seasonal bore wells in Ananthapuramu district are sustaining. And also extent grown in each bore well is increasing by two to three times based on the crop.

Impact of Drip on Income Horticulture Farmers

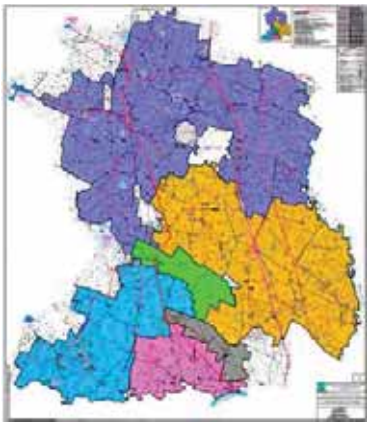
Sl. No	Name of the crop	Extent covered with drip/ sprinklers in ha	Yeild Kgs / Acre			Total Production difference in MT			Total income difference in lakhs.			% increase in income
			Surface	Drip	% more	Surface	Drip	Additional yeild	Surface	Drip	Additional Income	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Banana	13814.00	23000	35000	52.00	317722.00	483490.00	165768.00	25417.76	43514.10	18096.34	71.20
2	Citrus / Sweet Orange	37467.00	4000	12000	200.00	149868.00	449604.00	299736.00	14986.80	44960.40	29973.60	200.00
3	Grapes	285.00	8000	14000	75.00	2280.00	3990.00	1710.00	456.00	798.00	342.00	75.00
4	Mango	8013.00	3000	6000	100.00	24039.00	48078.00	24039.00	2403.90	4807.80	2403.90	100.00
5	Melons	7673.00	9000	18000	100.00	69057.00	138114.00	69057.00	5524.56	11049.12	5524.56	100.00
6	Papaya	10176.00	30000	80000	166.60	305280.00	814080.00	508800.00	21369.60	56985.60	35616.00	166.67
7	Pomegranate	3768.00	6000	12000	100.00	22608.00	45216.00	22608.00	13564.80	27129.60	13564.80	100.00
8	Sapota	6302.00	5000	10000	100.00	31510.00	63020.00	31510.00	1890.60	3781.20	1890.60	100.00
9	Vegetables	14152.00	9800	30000	206.00	138689.60	424560.00	285870.40	13868.96	42456.00	28587.04	206.12
10	Sprinkler for Groundnut	63425.00	1200	3000	150.00	76110.00	190275.00	114165.00	22833.00	57082.50	34249.50	150.00
11	Flowers	156.00	2500	4000	160.00	390.00	624.00	234.00	78.00	124.80	46.80	60.00
12	Sericulture (Caccoons)	314.00	600	800	133.33	188.40	251.20	62.80	565.20	753.60	188.40	33.33
Total		165075.00	102100	224800		1137163.60	2660427.00	1523263.40	122315.98	292564.32	170248.34	139.19

✓Since inception of APMIP ie., 2003-04 **Rs. 478.00 crores** was utilized as subsidy for implementing Micro Irrigation Project in the district.
✓By utilizing **Rs.478.00 Crores** on implementation of APMIP in the district an additional income of **Rs.1702.48 crores** is generating every year in Ananthapuramu district.

100% coverage of Micro irrigation in Ananthapuramu Dist



COMMUNITY SPRINKLERS / DRIP IRRIGATION SYSTEMS PROPOSED
Model at Shiggoan, near Hubli, Karnataka State.



- ❑ Total Area covered – 10,000 Ha.
- ❑ Cost of the Project - Rs. 235 Crores.
- ❑ Water source – Lifting from Warada River.
- ❑ Two Irrigations proposed for the crops like Ground nut, Maize and Cotton at critical stages of crop growth.

Projects proposed under Community Sprinklers

- ➢Area proposed to Cover – 7.00 Lakh Ha.
- ➢Crop – Ground nut
- ➢DPR is being prepared by NABCONS.
- ➢Blocks / Clusters identified.
  - ➢ Kanekal Tank
  - ➢Jeedipalli Reservoir
  - ➢PABR

Projects proposed under Community Drip Irrigation Systems (Fully automized)

- ➢Haresamudram, Bommanahal Mandal – 300 Acres.
- ➢PC Revu, Mudigubba Mandal – 160 Acres.

COMMUNITY SPRINKLERS / DRIP IRRIGATION SYSTEMS PROPOSED

Projects proposed under Community Sprinklers:

- ➢Area proposed to Cover – 7.00 Lac Ha in phased manner based water releases to tanks, to save the Ground Nut crop from drought by providing at 2 irrigations in critical crop growth.
- ➢Pilot project was implemented in Donnikota Village of Nallamada mandal covering 76 Acres (30.76 hectares) beniftting 16 farmers.
- ➢Blocks / Clusters identified in I phase:
  - ➢ Kanekal Tank - Water being fed by Tungabhadra HCL
  - ➢Jeedipalli Reservoir - HNSS
  - ➢PABR - Tungabhadra HCL and HNSS

Projects proposed under Community Drip Irrigation Systems (Fully automized):

- ➢Haresamudram, Bommanahal Mandal – 300 Acres.
- ➢PC Revu, Mudigubba Mandal – 160 Acres.

➢Model at Shiggoan, near Hubli, Karnataka State was studied by team

- ❑ Total Area covered – 10,000 Ha.
- ❑ Cost of the Project - Rs. 235 Crores.
- ❑ Water source – Lifting from Warada River.
- ❑ Two Irrigations proposed for the crops like Ground nut, Maize and Cotton at critical stages of crop growth.

NABCOS was entrusted to prepare feasible blocks and to prepare DPR

Community Sprinkler Irrigation Systems
Donnikota Village, Nallamada Mandal.

- ✓ Total Area of Groundnut crop – 76 Acres (30.76 hectares).
- ✓Number of Sprinkler sets supplied – 8 Nos.
- ✓Cost of 8 sets - Rs. 1,47,336/-
- ✓Normal yield - 600kgs per Ha(18.46Mt)
- ✓Yield recorded - 800kgs per Ha. (24.61 MTs from 30.76 Ha.)
- ✓Yield increase - 33%
- ✓Returns from 30.76 Ha. - Rs.6,83,020/-(normal conditions)
- ✓Returns from 30.76 Ha. - Rs.9,10,570/-(with sprinklers)
- ✓Additional returns - Rs 2,27,550/-

ANANTHAPURAMU DIST AS HORTICULTURE HUB

FIELD CROPS:DRIP Vs CONVENTIONAL IRRIGATION

CROP	YIEL (g/acre)			WATER USE (m^3/acre)		
	surface	drip	% more	Surface	drip	% saving
Sugarcane	30,000	75,000	150.0	9800	4960	49.3
Cotton	1,000	2,500	150.0	3600	1680	46.6
Onion (big)	10,000	18,000	80.0	2080	1120	46.1
potato	6,000	20,000	233.3	2400	1100	54.1
Chilli (dry)	1,200	3,500	191.6	1708	980	42.6
Grain corn	1,500	3,500	133.3	2304	1500	34.9
Pop corn	1,000	2,000	100.0	2200	1208	45.1
Groundnut	1,200	3,000	150.0	2620	1680	35.9
chickpea	1,200	2,000	66.6	1808	1048	42.0

FRUIT CROPS:DRIP Vs CONVENTIONAL IRRIGATION

CROP	YIEL (g/acre)			WATER USE (m^3/acre)		
	surface	drip	% more	Surface	drip	% saving
Banana	23,000	35,000	52.0	7040	3880	44.8
Grapes	8,000	14,000	75.0	3520	2320	34.0
Pomegranate	6,000	12,000	100.0	3920	2196	43.9
Sweet lime	4,000	12,000	200.0	6640	2560	61.4
Mango	3,000	6,000	100.0	5100	3324	34.8
Papaya	30,000	80,000	166.6	9120	2920	68.0
Watermelon	9,000	18,000	100.0	1680	1000	40.5
innow	8,000	22,000	175.0	884	692	21.7
Guava/tree	1,60	3,00	87.5	6.4	5.2	18.7

VEGETABLES CROPS:DRIP Vs CONVENTIONAL IRRIGATION

CROP	YIEL (g/acre)			WATER USE (m^3/acre)		
	surface	drip	% more	Surface	drip	% saving
Tomato	9,800	30,000	206.0	1901	1007	47.0
Capsicum	6,500	35,000	438.0	2041	1161	43.1
Bhendi	3,100	12,000	287.0	1683	1043	38.0
Brinjal	6,000	16,000	166.0	2483	1488	40.0
Beans	2,300	5,000	117.0	1776	1120	36.9
Baby corn	2,500	3,800	52.0	1462	820	43.9
Gherkins	5,000	22,000	340.0	1343	856	36.2
Carrots	6,000	15,000	150.0	1965	1301	33.8
Cauliflower	7,000	12,000	71.4	1562	1040	33.4
cabbage	8,550	22,000	157.3	1504	1016	32.4

Stimulate holistic development across horticulture sector, empower marginal & small stakeholders

Area expansion	POMEGRANATE,GRAPE, BANANA, PAPAYA,MELONS AND HIGH VALUE HORTI CROPS LIKE CAPSICUM, FLOWERS.
Productivity	Quality Planting material: TC Labs, Precision farming –poly houses, shade net nurseries, mulching etc
Sustainability	Creation of water resources, Horticulture Mechanization Knowledge based centers of excellence and HRD support
Technology	▪Protected cultivation and drip irrigation , ▪Establishment of regional centers of NRC- pomegranate, Grape,
Quality	▪Integrated PHM , Cold-chains with pre-cooling and transportation ▪ Sorting, Grading and Packaging
Marketability	▪Cold-chains with pre-cooling and transportation •Terminal market complexes and wholesale bazaars •Support for retail markets/outlets, vending carts

ANATHAPURAMU OF ANDHRA PRADESH vs ALMERIA OF SPAIN

WHEN ALMERIA COULD DO IT..... WHY NOT ANANTHAPURAMU...

CONTENT	ANANTHAPURAMU	ALMERIA
POPULATION	40,83,315	1,91,443
LOCATION	14.68N77.6E	36.50N 2.28W
RAINFALL	560mm, avg rainy days-23	200mm. Avg rainy days-26
TEMP	17-39C	8-38c
AREA	19,130 sq km	296.21 sqKM
climate	Semi arid. Hot and dry conditions	Hot subtropical arid. sunniest, warmest and driest climate in europe
Total cropped area	1187766	26200
Major crops	Ground nut, sweet orange, vegetables, tomato,melons	tomatoes, peppers, cucumbers and zucchinis
Total production	3.6 mil MT	2.5 mill MT
Value of produce	Rs7329.00 crores	Rs 14092.00 crores

Crop wise area covered and Water requirement in the district

S.No.	Nature of Crop	Crops in lakh Ha.			Water requirement in TMC
		Total Extent	Extent under Rain fed	Extent under Irrigation	
1	Agriculture	8.63	8.00	0.63	14.84
2	Horticulture	1.14	0.00	1.14	53.23
3	Sericulture	0.10	0.00	0.10	
	Total	9.87	8.00	1.87	68.07

•Water requirement for Agriculture and other crops cultivation - 68.07 TMC
•Water requirement for live stock - 10.00 TMC
•Water requirement for human consumption - 20.00 TMC
Total - 98.07 TMC

Water received in2015

•HNSS Project - 10.00 TMC
•TBP HLC System - 22.00 TMC
Total - 32.00 TMC

Water auditing

•After deducting available surface water of 32.00 TMCs, the net water being used from ground resources – 66 TMCs
•The total Groundwater resource available is 1,43,634 Ha.m (50 TMC).
•Net deficit is – 16 TMCs.

GROUND WATER RECHAREGE
RAIN WATER.... 350 TMV

Drought Proofing in Horticulture

Major Crops being covered under Micro Irrigation

INLINE

ONLINE

PROTECTED CULTIVATION WITH MICRO IRRIGATION

MULCHING WITH PERENNIAL CROPS




MULCHING WITH NON PERENNIAL CROPS




MICRO IRRIGATION WITH FARM PONDS




GREEN HOUSE AND POLY HOUSE CULTIVATION




SPRINKLER IRRIGATION

MICRO SPRINKLERS

Similar to the sprinkler method of irrigation, through Micro Sprinklers water is sprayed into the air and allowed to fall on the ground surface more uniformly and with better efficiency by utilising more no. of small sprinklers.


THANK YOU SIR
PD APMIP
ANANTHAPURAMU

KRISHNA DISTRICT

Out of 50 mandals,
28 Delta mandals &
22 Upland mandals

Agriculture - Growth Engines
2015-16 over 2014-15 in Krishna district

Sl. No	Growth engine	Area (lakh ha)		Yield (kg/ha)		Production ('000 MT)			GVA value (Rs. in Cr.)	
		2014-15	2015-16	2014-15	2015-16	2014-15	2015-16	% increase	2014-15	2015-16
1	Rice	3.18	3.36	4051	4313	1158.8	1353.6	16	2433.4	2841.7
2	Cotton	0.55	0.55	701	762	39	46	18	345	442
3	Sugar cane	0.16	0.16	89400	100000	1430	1600	12	315	352
4	Black gram	1.30	1.30	754	1000	98	130	32	421.4	559
5	Maize	0.21	0.31	6500	9000	136.5	279.0	104	178.8	365.5
		5.40	**5.68**			**2862.3**	**3408.6**		**3693.6**	**4560.2**

Growth Engine- Paddy (16%)

Existing yield gap of 263 kg/ha in rice

- Promoting green manure crops like Daincha, pillipesara and sunhemp
- Promoting HYV like MTU-1061, MTU-1121 and MTU -1075 in place of existing old varieties like BPT-5204.
- Promoting Mechanized transplanting, Direct seeded rice, drum seeder, seed cum fertiliser drills.
- Encouraging the application of micro nutrients like Zinc based on soil test recommendations
- Adoption of rotational irrigation / warabandi system in tail end 11 mandals

Action Plan for addressing the yield gap

Sl.No.	Technological interventions	Area proposed
1	Varietal replacement in 11 sea coastal mandals	25,000 ha
2	Direct sowing by Drum Seeding, Seed cum fertilizer drill , Mechanical transplantings in 50 mandals	75,000 ha
3	Micronutrient application in 50 mandals	30,000 ha
4	Green manuring in 22 mandals	50,000 ha
5	Raising Red gram on Rice field bunds in 28 delta mandals	2,500 ha

Growth Engine- Cotton (18%)

- Adoption of stem application method for effective control of sucking pest complex in 220 ha in 22 mandals.
- Intercropping with red gram in 1000 ha in 22 mandals for generation of additional income.
- Encouraging Mechanical picking of cotton for reducing labour cost.

Action Plan for addressing the yield gap

Sl.No.	Technological interventions	Area proposed
1	High density planting in 10 mandals	500 ha
2	Micronutrients like Zinc, Boron & Magnesium supply in 22 mandals	10,000 ha

Growth Engine- Blackgram (32%)

- Growing of YMV resistant/tolerant varieties like PU-31, TBG-104 and LBG-752.
- Need based plant protection sprayings in 10,000 ha. under NFSM cluster demonstrations for sustainable returns.
- Encouraging farmers to go for mechanical harvesting in 300 ha, in 10 mandals for reduction in cost of cultivation

Action Plan for addressing the yield gap

Sl.No.	Technological interventions	Area proposed
1	Varietal replacement to YMV in 28 mandals	50,000 ha
2	1 or 2 need based light irrigations in 28 mandals	10,000 ha

Growth Engine- Maize (104%)

- Rabi maize would be popularised in 31,000 ha in rabi 2015-16
- Encouraging the farmers to go for mechanical harvestings in 1000ha for reduction of cost of cultivation.
- Growing of Maize hybrids with emphasis to having more value addition and more returns in 100 ha in 4 mandals of vuyyur, Kankipadu, Penamalur & thotlavallur.

Action Plan for addressing the yield gap

Sl.No.	Technological interventions	Area proposed
1	Additional area under Maize in 12 mandals	15,000ha
2	Zero tillage in rice fallows in 10 mandals	10, 000ha
3	Micronutrient supply in 22 mandals	5,000 ha
4	Need based plant protection sprayings for control of stem borer in 10 mandals	1,000 ha

Growth Engine- Sugarcane (12%)

- Growing of suitable sugarcane varieties like 2003-V-46, 87A-298.
- Growing of Maize hybrids with emphasis to having more value addition and more returns in 100 ha in 4 mandals of vuyyur, Kankipadu, Penamalur & thotlavallur.
- Encouraging planting of 35 days old single node seedlings in 100 ha in 3 mandals to enhance the yield.

Action Plan for addressing the yield gap

Sl.No.	Technological interventions	Area proposed
1	Varietal replacement in 6 mandals	2,000ha
2	Micronutrient supply in 5 mandals	500 ha
3	Sowing in paired rows and promoting drip irrigation system in 5 mandals	500 ha

Micronutrients to Boost Agricultural Production and Productivity

- In paddy, crop exhibited Zn & Fe deficiencies but as per analysis, the deficiencies of Zn, Fe, Mn, Cu. were observed
- In cotton, crop exhibited Zn & Fe deficiencies but as per analysis, the deficiencies of Zn, Fe, Mn, Cu. were observed
- Soil sample collection and analyses by DoA is in progress. A target of 15,000 micronutrient soil samples is allotted, out of which 4257 samples received by labs.
- For 2015-16, we are planning supply of 1000 MTs of ZnSO4 & 2000 MT Gypsum for paddy and 240 MTs of ZnSO4, 27 MTs of MgSO4 and 1.5 MTs of Borax in Cotton to enhance productivity.

Micro-nutrients Soil analysis data for 2014-15

S No	istrict	Total No of samples analysed	inc		copper		Iron		Manganese		Sulphur		
			Below Critical Level	%	Below Critical Level	%	Below Critical Level	%	Below Critical Level	%	Total samples analysed	Below Critical Level	%
	a	33 5	03	65.47	0	1.19	5	16.17	1	3.83	05	0	2.56

Government of Andhra Pradesh

Department of Fisheries

P.JAYARAO,
DY.DIRECTOR OF FISHERIES
KRISHNA

nland i erie e ource

Reservoirs- 01	3000 ha
Irrigation tanks (MI tanks) 228	5 560 ha
olleru lake (for rishna)	4488 ha(44.88 sq km)
Rivers and canals	2 660 ms
Gram panchyath tanks(2825)	7821.38 ha
Area under freshwater aqua culture	38 108.3 ha
Govt. fish seed farms	04 Nos
Private hatcheries	12 Nos
Seed production (fry)	100 crores

rac i ater e ource

Potential	30 000 ha
Total area developed	20 000 ha
isting area under culture	5 600 ha
Hatcheries	4
Species under culture	*L. vannamei , P. monodon, sea-bass,crabs and silver pampano*
Productivity	varying depending on species and culture methods (1-3 MT ac)

Marine i erie e ource

Coastline	111 ms
Marine fishermen population	1 12 977
Active fishermen	38 914
Fishing harbours	01
Fish Landing Points	26
Traditional crafts	130
Motorised crafts	756
Mechanised vessels	95

DISTRICT FISH&PRAWN PRODUCTION DETAILS IN MTs

Sl no	2014-15 (Achievement)	2015-16(Target)	Difference of production in Tons	Growth rate %
1	Marine fish- 28,037	Marine fish- 27,740	-297	-1.05
2	Marine shrimp- 11,906	Marine shrimp- 13,200	+1294	10.86
3	BW Fish(sea bass, crab)- 575	BW Fish(sea bass, crab)- 15,000	+14,425	2508
4	BW shrimp- 13,801	BW shrimp- 33,200	+19,399	140.56
5	Inland fish- 5,21,398	Inland fish- 5,77,310	+55,912	10.72
6	Freshwater prawn- (vannamei) 24,585	Freshwater prawn- (vannamei) 25,340	+755	3.07

PILOT SITES DETAILS

INTERVENTIONS FOR PILOT AREA

FOR BRACKISH WATER :

- Revive abundant brackish water aquaculture Ponds
- By increase productivity in the existing tanks
- By Promotion of alternative species like Crab , Sea bass fish and Silver pompano
- By adopting poly culture practices either with P.monodon or L.vannamei shrimp
- By converging Govt. subsidy schemes to this area
- By Supply quality seed with the help of RGCA
- By transfer latest Technology and also by impart Training to the farmers
- By Close technical monitoring
- By Providing lab/mobile lab facilities
- By promoting organic farming

CONTINUED……

FOR FRESHWATER AQUACULTURE:

- By converting unproductive low laying agriculture lands in to fish tanks
- By increasing productivity in the existing tanks
- By Promotion of alternative species like Red tilapia
- By converging Govt. subsidy schemes to this area
- By Supply quality seed with the help of RGCA
- By transfer latest Technology and also by impart Training to the farmers
- By close technical monitoring by the department
- By Providing lab/mobile lab facilities
- By promoting organic farming

GAPS TO ADDRESSED IMMEDIATELY TO ACHIVE ABOVE TARGETS

- APPOINT TECHNICAL STAFF THROUGH OUTSOURCESING TO THE PILOT SITE MANDALS
- CONSTITUITE TECHNICAL WING FOR CLOSE MONITORING
- TIEUP WITH RGCA FOR ASSURED SUPPLY OF SEABASS AND CRAB SEED & FEED
- DEPUTE TECHNICAL STAFF FOR TRAINING TO THE RGCA TO ACT AS MASTERTARINERS FOR CRAB AND SEABASS CULTURE
- PROVIDE CONVEYANCE AND BUDGET TO THE TECHNICAL TEAM FOR QUICK MONITORING
- PROVIDE LAPTOPS TO THE TECHNICAL STAFF

HRD PROBLEMS TO BE ADDRESSED TO ACHIVE TARGETS

- FILL UP ALL VACANCIES IN THE DEPARTMENT
- IMMEDIATELY APPOINT MULTIPURPOSE EXTENTION OFFICERS IN AQUACULTURE POTENTIAL MANDALS
- DEPUTE TECHNICAL FIELD STAFF FOR TRAINING IN THE ABROAD TO LEARN ADVANCED TECHNICS
- PROVIDE SUFFICIENT BUDGET FOR RECURRENGING EXPENDITURE FOR LAB
- PROVIDE LOPTOPS FOR TECHICAL STAFF

INFRASTRUCTURE FECILITIES TO BE PROVIDED

- ESTABLISH 4 NEW AQUA LABS IN THE DISTRICT
- STRENGTHEN AND UPGRADE KAIKALURU STATE REFERAL LAB
- INTRODUCE MOBILE AQUA LAB
- ESTABLISH CRAB,SEA BASS,SILVER PAMPANO HATCHERIES IN THE DISTRICT
- ESTABLISH FRESHWATER AQUA FARMERS ADVANCED TRAINING CENTRE
- PROVIDE CONVEYANCE TO THE TECHNICAL WING
- PROVIDE INTERNAL ROADS AND ELECTRIFICATION IN THE AQUACULTURE AREAS FOR QUICK TRANSPORT
- DESILTING THE SALT CREEKS IN THE BRACKISHWATER AREAS FOR AVAILABILITY OF WATER

NEED TO MODIFY SOME POLACIES AND GOs

- ASSIGNED AND D- FORM LANDS SHOULD BE ALLOWED TO CONVERT IN TO FISH/PRAWN TANKS WHERE IT IS SUITABLE FOR AQUACULTURE
- LIBARALIZE THE COASTAL AQUACULTURE GUIDELINES FOR SMALL AND MARGINAL FARMERS
- ISSUE INTEGRATED PERMISSION FOR CULTURING OF EXOTIC NEW SPECIES INSTEAD OF SEPARATE PERMISSIONS (GO NO 15 FOR VENNAMAI GO NO 20 FOR TILAPIA AND PANGASIUS)
- TREAT THE AQUACULTURE AS AGRICULTURE TO ATTRACT MORE FARMERS AND ALSO TO IMPLIMENT SOME SUBSIDIES
- DELIGATE POWERS TO FISHERIES DEPARTMENT TO CONTROL ADULTRATIONS IN AQUA CHEMICALS AND MEDICINES
- STRENGTHEN FISH SEED ACT AND BRING ALL SHRIMP , FISH AND CRAB HATCHERIES UNDER THE CONTROLL OF FISHERIES DEPARTMENT FOR SEED QUALITY CONTROL

Fish for nation Health
Fish for nation Wealth

Thank You

WELCOME

TO

DELEGATES OF

PRIMARY SECTOR MISSION

HORTICULTURE DEPARTMENT –KRISHNA DISTRICT

HORTICULTURE PROFILE IN RISHNA ISTRICT 2014-2015

Name of the Crop	Area (Ha)	Production (MTs)	Productivity (MT/Ha)	Average Market Price (Rs/Ton)	Total Value.(Rs. In Lakhs)
I.Short term Crops					
1. a a a o al	1 3	30 0	30	000	38 1.80
.T lt a a a	1 0	000	50	1 000	0.00
3. a a a	1 1	0 5	5	000	35. 5
. To ato	1010	50500	50	5000	5 5.00
5. ll	5	80	5	0000	330 .00
. ll	55	83 0	15	0000	1 8.00
.T	188	113		0000	5. 0
8.	53	5	15	0000	.00
. ta l o	8 8	8 80	10	10000	8 8.00
10. lo o	3 8	3 80	10	5000	5.00
Sub-Total-1	23503	264992			60381.45

HORTICULTURE PROFILE IN RISHNA ISTRICT 2014-2015

Name of the Crop	Area(Ha)	Production (MTs)	Productivity (MT/Ha)	Average Market price Rs/Ton	Total Value.(Rs. In Lakhs)
II.Long term Crops					
1. a o	31	50503	8	18000	0 05.
. a	1	3.	0.	11 500	8 .35
3. t a	13	18	1	1 000	1.8
.	03	105 5	15	15000	1581. 5
5. o a at	11	0	0	000	13. 0
. a ota	5 1	5 10	10	5000	0.50
. a a	1	1330	15	10000	133.00
8. o oa	8	3	0.5	150000	5 3.50
. o o t	18	. 0 a t	15000 t	000 1000 t	1 . 0
10. l al	1 88	11 8 5	15	000	01. 5
11. t	0	1 5	10	5000	53 . 5
Sub-Total-2	81702	658161	108.1	360500	105648.8

HORTICULTURE PROFILE IN RISHNA ISTRICT 2014-2015

Name of the Crop	Area (Ha.)	Productio n (MTs)	Productivity	Average Market Price	Total Value.(Rs. In Lakhs)
III.Protected Cultivation					
1. ol o lt at o t					
. ta l a	5 0		t 5 0	35000	3.15
. lo a	1 80	3.00 a lo	1.00 a lo t 5 0	. 3 a lo	.00
. lo a at o	11 0	.00 a lo	1.00 a lo t 5 0	. a lo	1 .00
15. a t o t a t	00	1.50 To	50 t 300	. 50	0. 5
. a a o a a	10	.00 a at a	0 000 at la a	. 0 a at la	0.00
. ta l . t . ll al to ato	0000	100 a l	.5 a 1000 t	. 0.5 a l	50.00
Total 3					11 . 0
Grand -Total	105205				166546.90

Major Growth Engines contributing to the Growth of GS P in rishna istrict

Sl. No	Crop	Existing Area (Ha)	Prodn (MTs)	Value Rs. In Lakhs	Additional area proposed during 2015-16			Total (Existing Proposed)		
					Area (Ha)	Prodn (MTs)	Value (Lakhs)	Area (Ha)	Prodn (MTs)	Value (Lakhs)
1	Mango	63129	505032	90906	1200	12	18000	63329	505032	90906
2	Vegetables	8468	84680	84608	791	28321	1871	9259	113001	86479
3	Red Chillies	9456	47280	33096	225	1350	945	9681	48630	34041
4	Turmeric	1887	11322	7925	100	650	46	1987	11972	7971
5	Oilpalm	12988	112875	7901	1700	0	0	14688	112875	7901
6	Banana	1554	49020	4592	100	6000	600	1654	55020	5192
	Total	97482	810209	229028	3116	36321	3462	100598	846530	232490

5

PRIMARY SECTOR MISSION (HORTICULTURE)- 2015-16

Additional Area Proposed during 2015-16 to Achieve ouble igit Growth (i.e.30%)on the existing ist.G P

Name of the istrict: rishna

Sl. No	Name of the Crop	Units No/ sqmt/Ha	Additional Area Proposed (Ha) (2015-16)	Expected increase in Production by following Interventions (MTs/Ha)	Expected increase in Productivity by following Interventions (MTs/Ha)	Average Market Price(Rs. Mts) (based on 2014-15 prices	Total value(Rs. in Lakhs) (6*8)	Financial Budget requirement (Rs. In Lakhs)	Interventions proposed to increase Production/ Productivity
1	a o	a	00	0	0		0 0	3 .00	l ato o l l ato o o t a t lo .
	ta l	a	1	83 1	15	5	8	03.8	ta l l l lat l a al T ll a o t a t a a t
3	ll	a.	5	1350		0000	3 0 1	38. 0	ol ato l lat l
	T	a.	100	50	.5	000	1	1. 0	ol ato l
5	l al	a	1 00	0	0		01	30.	ol ato lt o lt at t a a ta lt at t t a a t.
	Banana	Ha.	100	000	0	10000	51	3 .50	T. . a a a t
	TOTAL		**3116**				**232490**	**948.017**	

INTERVENTIONS TO INCREASE YIEL S OF MAJOR HORTICULTURE CROPS IN RISHNA ISTRICT

Sl. No	Crop	Present Yield (M.Tons)	Increased yield due to intervention s (M.Tons)	% of increase	Interventions
1	Mango	8	12	50%	Rejuvenation, Micro Irrigation, Integrated Pest Management, Integrated Nutrient Management, Minimi ation of Post harvest losses.
2	Guava	15	20	33%	uality Guava layers, Micro Irrigation, Plastic Mulching, Integrated Pest Management Integrated Nutrient Management, use of plastic crates for collection and transport
3	Tissue Culture Banana	50	60	20%	uality Tissue Culture Banana plants, Micro Irrigation, Plastic Mulching, Integrated Pest Management Integrated Nutrient Management.
4	Oil Palm	15	20	33%	Micro Irrigation, Inter crops, Integrated Pest Management and Integrated Nutrient Management.
5	Tomato	50	75	70%	Use of Hybrid varieties, Trellies, Micro Irrigation

PRIMARY SECTOR MISSION-HORTICULTURE INTERVENTIONS PROPOSED

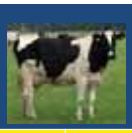
S.No	Name of the Crop	Micro Irrigation				
		Phy., Ha.,	Fin., Rs.in Lakh			
1	T.C.Banan	50	23.88			
2	Banana	20	15.92			
3	Papaya	25	19.90			
4	Tomato	50	50.00			
5	R.Chillies	550	550.00			
6	Turmeric	120	120.00			
7	Hy.Tomato	100	100.00			
8	Mango	300	60.28			
9	Acidlime	50	14.50			
10	Sapota	40	10.00			
11	Guava	150	50.33			
12	Cocos	30	10.78			
13	Coconut	30	7.50			
14	Oil Palm	600	179.68			
15	Major Veg.Crops 6 Nos.	520	520.00			
16	Major Flower Crops	60	47.76			

THANK YOU

N.SUJATHA

ASSISTANT DIRECTOR OF HORTICULTURE-I,

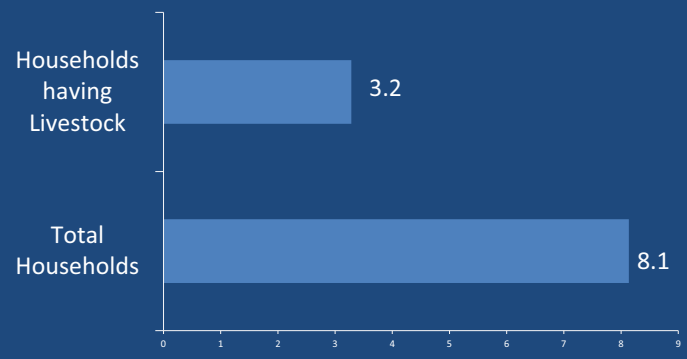
KRISHNA DISTRICT, VIJAYAWADA.



AH Dept –Krishna Livestock Status

Slno	Livestock Type	Number in Lakhs	Position in the State
1	CATTLE	0.90 Lakhs	12
2	BUFFALOES	6.96 Lakhs	3
3	SHEEP	5.86 Lakhs	6
4	GOAT	1.51 Lakhs	5
5	DESI POULTRY	10.81 Lakhs	2
6	COMMERCIAL POULTRY	101.28 Lakhs	2

1



AH Dept –Krishna Core Outputs 2013-14 & 14-15

Slno	Indicator	2013-14	14-15	15-16 proposed
1	Milk (in Lakh MTs)	9.8	10.58	12
2	Meat (in Thousand MTs)	58.89	65.11	68.00
3	Eggs (in Lakh numbers)	15440	17434	21000

GVA – growth rates

Growth engine	GVA in Crores Rs			% Growth over last Year	
	2013-14	2014-15	2015-16	12-13 to 13-14	2014-15 to 15-16
Milk	2349.6	2772.38	3184	17.994	14.847
Meat	973.2	1076.16	1223.1	10.580	13.654
Eggs	339.61	383.48	439.86	12.918	14.702
Total	**3662.41**	**4232.02**	**4846.96**	15.553	14.531

Entrepreneurship - productivity, reliability and sustainability of smallholder Dairy farming

- Unemployed youth & Small holders - paradigm shift to entrepreneurship
- 5-10 Milch Animals
- Bank linkage – No subsidies –DCC App
- Expected milk production -42 Lakhs Litres
- GVA - 14.7 Crores rupees

Fodder Production –Convergence with NREGS & ATMA

- Fodder Production Groups – 5
- Selected Pilot Villages
- chaffed fodder -door steps of required farmers
- 40 Acres for 240 M.A.s
- 2 litres/ Milch Animal 75 L Litres/Year = 0.648 Crores Rs

Peer group -Capacity building

- Sensible progressive farmers -congregated - Dist Peer group
- Trained in all aspects
- group members communicate - Calf weaning feed , Chelated Mineral Supplementation .
- The goal will be achieved through Intensive one to one interaction at Village level –
- convergence with SERP & ATMA .
- enhancing milk productivity , Value of the Animal , Calf to heifer to Mich Animal transformation i.e. asset creation.

Peer group -Capacity building

- 500 Villages X 25 Farmers X 1 Milch Animal , 1 female calf
- 37.5 Lakh Milk per lactation and 12000 heifers at least @15000 Rs/H

Budget Items

S.No	Intervention	Activity	Proposed Units	Value Calculation	Incremental increase (in Crores Rs)
1	Ksheerasaagar	Scientific feeding and Management from last trimester of pregnancy to first 3 months of Lactation	5000	Enhancement of 1 Liters/ Milch Animal X 225 M.A.s X 30 Rs X 300 Days	4.5
2	Suphalam	Registration of Infertile -low productive or unproductive Animals :: make them conceive and productive	20000	Enhancement of 2 Liters/ Milch Animal X 200 M.A.s X 30 Rs X 300 Days	24
3	Sunandini	Calves of 4-6 Months will be selected and will be given calf feed till they attain the age of 24 Months or conception	8000	Value addition of Rs 12000 /Animal X 200 Calves	9.6

Interventions Budgetary- Meat

S.No	Convergence Scheme Name (Govt)	Activity	Proposed units/no per village	Expected Meat production (In MTs)	Incremental increase (in Crores Rs)
1	Mini Sheep / Goat	5 Female Sheep or Goat + 1	110	4.4	0.0792
2	Ram lamb units	Ram lambs are supplied for meat purpose	50	10	0.18
3	Backyard Poultry Scheme (Mana Kodi)	Improved Desi bird variety chicks Low Input like Rainbow rooster , Vanaraja etc., Each unit of 45 Chicks in two to three cycles	1400	113.4	1.464
4	Prevention of inbreeding	Breeding Ram exchange	2500	125	2.25

Interventions Budgetary- Eggs

S.No	Scheme	Activity	Proposed units	Egg Production (in Lakhs numbers)	GVA (in Crores Rs)
1	Mana Kodi	Low input - Improved Desi birds like rainbow rooster @ 45 Chicks	1400	94.5	2.268
2	Backyard Poultry Egg Production enhancement involvement activities	Capacity building on - simple interventions like Deworming, feed supplementation etc.,	50000	2.5	0.075

Thank You

Dr KVL Narasimharao

Deputy Director(AH)

Kishna






Andhra Pradesh-Primary Sector Mission

(Transforming Agriculture in Andhra Pradesh)

Krishna District AP Primary Sector Team

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

District Information/geographical profile

- **Latitude: 15°-43 N &17° 10 of North**
- **Longitude : 80° E & 81° 33 of East**
- **District Area : 8727 km^2 - 50 Mandals**
- **Rainfall 1034 mm**
- **Four revenue divisions-Vijayawada, Machilipatnam, Gudivada, Nuziveedu.**
- **Naturally divided into –Upland & Delta**

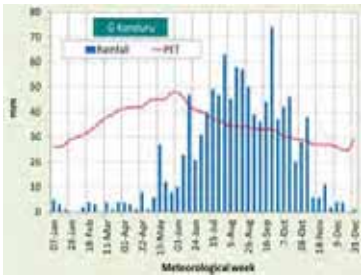
Soils:

1. **Black cotton soils- 57.6%**
2. **Sandy clay loams - 22.3%**
3. **Red loamy soils - 19.4%**
4. **Sandy soils - 0.7%**

Rainfall Distribution

Element	Kharif	Rabi	Annual
PET (mm)	733	679	1811
Rainfall (mm)	683	162	910

Ghantasala



Element	Kharif	Rabi	Annual
PET (mm)	735	671	1807
Rainfall (mm)	897	103	1076

G Konduru

Process Adopted for Sites Selection and Benchmark Characterization in KRISHNA

Criteria adopted

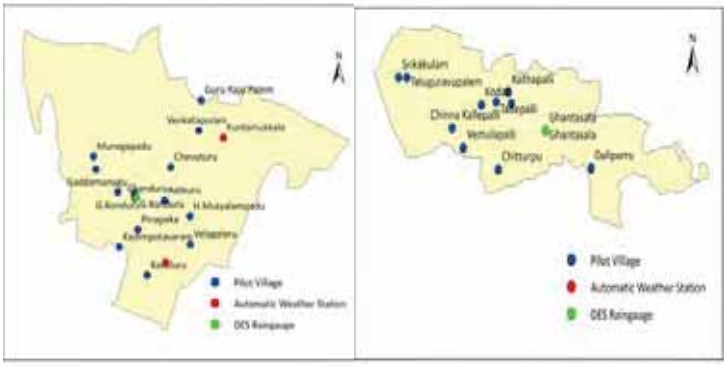
- Representative site for the district
- Good potential for impact to bridge the gaps
- Accessibility
- Willingness to adopt new
- Presence of suitable institutions

Process

- Stakeholders' consultations
  - District collector
  - CPO
  - JD of all line departments
  - Farmers
- Consultation with all line Departments
  - Mandal level staff of all line departments

Primary sectors identified in the pilot sites

Mandal and Crops	Village
Ghantasala (10 villages) (Paddy, Maize, Pulses, Sugarcane)	Srikakulam, Teluguravupalem, Kodali, Kothapalli, Ghantasala, Tadepalli, Chinnakallepalli, Vemulapalli, Chitturpu, Daliparru
G. Konduru (12 villages) Cotton, Paddy, Chillies, Vegetables, Mango)	Kavuluru (Kadimpotavaram) Velagaluru, H.Mutyalampadu, Aatkuru, Pinapaka, G.konduru, Gaddamanugu, Cheruvu Madhavaram, Munagapadu, Chevuturu, Venkatapuram, Gururajupalem
Reddygudem (Mango)	Nagaluru
Nagayalanka (Fisheries)	Sorlagondhi, Sangameswaram,Gullalamoda, Yetimoga, Nali, Deendayal puram
Machilipatnam (Fisheries)	Bandarwest, Garaladibba, Polatitippa, Kona, Pedayadara, PT palem, Kpt Palem, Chinnapuram
Kalidindi (Fisheries)	Poyjumarru, Tadinada
Nandiwada (Fisheries)	Pedalingala, Polukonda



G.Kondur Mandal, Krishna

Ghantasala Mandal, Krishna

Pilot site crop area

G onduru	Area in Ha		Ghantasala	Area in Ha
No of villages covered	13		No of villages covered	10
Total Geo Area	9900		Total Geo Area	8203
Total Cult Area	9272		Total Cult Area	5910
Cotton	2980		Paddy	5419
Paddy	705		Sugar cane	523
Chillies	327		Pulses	4719
Vegetables	162		Mai e	717
Mango	502			

Selected pilot sites (Horticulture)

Sl. No	Name of the Mandal	Village	Selected Crop	Area in Ha.
1	G.Konduru	1.Gaddamanugu 2.Cheruvumadhavaram 3.Munagapadu	Chilli Tomato Gourds	50.00 30.00 20.00
2.	Reddy Gudem	Naguluru	Mango	200.00

Agriculture - Growth Engines 2015-16 over 2014-15 in Krishna district

Sl. No	Growth engine	Area (lakh ha)		Yield (kg/ha)		Production ('000 MT)			GVA value (Rs. in Cr.)	
		2014-15	2015-16	2014-15	2015-16	2014-15	2015-16	% increase	2014-15	2015-16
1	Rice	3.18	3.36	4051	4313	1158.8	1353.6	16	2433.4	2841.7
2	Cotton	0.55	0.55	701	762	39	46	18	345	442
3	Black gram	1.30	1.30	754	1000	98	130	32	421.4	559
4	Maize	0.21	0.31	6500	9000	136.5	279.0	104	178.8	365.5
		5.40	**5.68**			**2862.3**	**3408.6**		**3693.6**	**4560.2**

Targetted growth increase (%) Agriculture

			2014-15					2015-16			GVA difference	
			Area (ha)	Productivity(kg Ha)	Production (q)	MSP (Rs Q)	GVA (in Cr)	Productivity (kg Ha)	Production (q)	GVA (in Cr)	In Crores	In %
G Konduru	Kharif	Paddy	704.17	4158	29279	1400	4.099	4580	32251	4.52	0.416	10.1
		Red Gram	2.80	1167	33	4350	0.014	1270	36	0.02	0.001	8.8
		Cotton	3017.50	2828	85335	4050	34.561	3110	93844	38.01	3.446	10.0
		Maize	11.20	7167	803	1310	0.105	7710	864	0.11	0.008	7.6
		Black gram	16.00	730	117	4300	0.050	800	128	0.06	0.005	9.6
	Rabi	Black gram	72.00	975	702	4300	0.302	1065	767	0.33	0.028	9.2
		Green Gram	57.00	860	490	4500	0.221	940	536	0.24	0.021	9.3
		Maize	249.00	7900	19671	1310	2.577	8450	21041	2.76	0.179	7.0
		Paddy	406.50	5610	22805	1400	3.193	6160	25040	3.51	0.313	9.8
Ghantasala	Kharif	Paddy	5412.82	5846	316434	1400	44.301	6430	348044	48.73	4.426	10.0
	Rabi	Black gram	4126.60	1125	46424	4300	19.962	1230	50757	21.83	1.863	9.3
		Green Gram	437.80	750	3284	4500	1.478	825	3612	1.63	0.148	10.0
		Maize	716.73	7500	53754	1310	7.042	8080	57911	7.59	0.545	7.7

Targetted growth increase (%) Horticulture

		2014-15					Expected 2015-16				GVA Variation	
Mandal	Village	14-15 area Total	14-15 productivity	14-15 prodn Total (Q)	14-15 MSP (Rs/Q)	14-15 GVA (cr)	15-16 Area Total	15-16 Producti	15-16 prdn Total (q)	15-16 GVA (cr)	In crores	in %
G Konduru	Total area	100	235500	27775		2.178	100	259155	30558	2.396	0.218	10.0
	Brinjal	15	60000	3000	500	0.150	15	66000	3300	0.165	0.015	10.0
	chillies	15	13500	675	8000	0.540	15	14835	742	0.593	0.053	9.9
	Gourds	15	42000	2100	800	0.168	15	46320	2316	0.185	0.017	10.3
	Tomato	55	120000	22000	600	1.320	55	132000	24200	1.452	0.132	10.0
Reddy gidem	Mango	200	8000	16000		3.520	200	8080	16160	3.555	0.035	1.0

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Targeted growth increase (%) Fisheries

Mandal	Type	Sector	Type	Area (ha)	Farmgate Value (Avg)/ton n	2014-15 prdn(tons)	2014-15 GVA (cr)	2015-16 prdn (tons)	2014-15 GVA (cr)
Nandiwada	L-Vennamei	Fishery	Inland	200	300000	400	12.0	500	15.0
Nandiwada	fish culture	Fishery	Inland	200	70000	1600	11.2	1600	11.2
Kalidindi	L-Vnnamai	Fishery	Inland	200	300000	400	12.0	500	15.0
Kalidindi	fish culture	Fishery	Inland	200	70000	1600	11.2	1600	11.2
Nagayalanka		Fishery	Marine	600	300000	300	9.0	600	18.0
Machilipatnam		Fishery	Marine	600	300000	300	9.0	600	18.0

Animal Husbandry Sector --in Pilot sites Krishna District - Milk

S.No	Mandal	Pilot sites - Villages	Proposed units/no per village	Proposed value in Rs 2014-15 (in Lakh Rs)	Targeted Increase for GDP value for 2015-2016 (in Lakh Rs)	Incremental increase through the interventions (in Lakh Rs)	% Enhancement from the Intervention
1	Ghantasala	Chinakallepalli, Vemulapalli, Chitturpu, Kodali, Tadepalli, Kothapalli, Ghantasala, Daliparru and Srikakulam & Teluguraopalem - *10 Villages*	225	1321	1634	20.25	1.24
2			200			24	1.47
3			40			64.8	3.97
4			200			40	2.45
5			700			63	3.86

1	G.Kondur	KAVULURU , VELAGALERU , HAVELI MUTHYALAMPADU , ATKURU , PINAPAKA , G.KONDURU , GADDAMANUGU , CH.MADHAVARAM , MUNAGAPADU , CHEVUTURU , GURRURAJAPALEM VENKATAPURAM *(12 Villages)*	200	1787	2070	18	0.87
2			480			57.6	2.78
3			45			64.8	3.13
4			120			24	1.16
5			500			45	2.17
6			240			33.6	1.62

Animal Husbandry Sector --in Pilot sites Krishna District - Eggs

S.No	Mandal	Proposed units/no per village	Egg Production through this intervention (in Lakh numbers)	Achieved value in Rs 2012-13, 2013-14	Proposed value in Rs 2014-15	Targeted Increase for GDP value for 2015-2016	Incremental increase in Value added through the interventions (in Lakh Rs)	% Enhancement from the Intervention
1	G.Kondur	50	3.375	90, 93	94	96	8.1	1.3568
2	Ghantasala	40	2.7	1265, 1304	1317	1344	6.48	1.0854

Animal Husbandry Sector --in Pilot sites Krishna District Meat

S.No	Mandal	Proposed units/no per village	Expected Meat production through the intervention	Proposed value in Rs 2014-15	Targeted Increase for GDP value for 2015-2016	Incremental increase through the interventions (in Lakh Rs)	% Enhancement from the Intervention
1	G.Kondur	10	0.4	557	597	0.72	0.1206
2		10	2			3.6	0.6030
3		50	4.05			7.29	1.2211
4		120	6			10.8	1.8090

1	Ghantasala	10	0.4	922	1033	0.72	0.0697
2		10	2			3.6	0.3485
3		40	3.24			5.832	0.5646
4		125	6.25			11.25	1.0891

Proposed interventions in Ag sector

Agriculture	1	Soil sampling for nutrient based recommendations	1.Collection of soil samples in the selected pilot site of 10,000 hac @ 20 samples for 500 ha.
			2. Conducting Gramasabha's and capacitaate through training to DoA (AEO's) and farmers on soil sample collection. (completed 12 villages)
			3. Conducting Gramsabhas on soil sample collection
			4. Collection of soil samples, analysis and issue of soil health cards. covering all major crop areas in the village.
	2	Micro nutrient application	1. Identification of micronutrient deficient areas based on soil analysis data.
			2. Finalisation of micronutrient requirements mandal wise and village wise.
			3. Micro-nutrients Indent placement to Nodal agencies thru DoA
			4. Distribution and application of of micronutrients (Zinc, Boron, Sulphur)
	3	Identification of problematic soils	1. Training/ awareness on reclamation of problematic soils
			2. Placing of indents to the nodal agencies and supply of inputs
			3. Supply of Green manure seed (Dhiancha, sunhemp, Pillipesara)
			4. Supply ex situ Green manure seed on field bunds (Gliricidia)

Proposed interventions in Ag sector

Agriculture	4	Soil management for improvement of organic content in soil	1. Assesment of green manure seed requirement
			2.Placing of Indents to APSSDC and supply of seed
			3. Capcity building/training on importance of Green manure seed
			4.Promotion of vermi compost units and Aerobic composting
	5	Promotion of Quality seed	1.Identification and selection of farmers for seed multiplication .
			2. Ensuring position of quality seed in private outletsand placing indents.
			3. Supply of Foundation / Certified seed through APSSDC.
			5. Promoting improved Paddy varieties for Direct seeded rice under dry conditions.
			6. Supply of Minikits of New varieties to the progressive farmers.
	6	Enhancing crop Production through IPM, INM	1.Create awreness on selection of HYV / pest and disease resistant varities suitable to their agro climatic conditions.
			2.Organising Demo plots on improved crop production technologies through Chandranna Rythu Kshetrams (CRK) ,Polambadi & ATMA Demonstrations
			3. Popularising Best Management practices in Rice, Vegetables
			4. Organising training programs on crop specific Integrated nutrient/Pest/ Disease /weed / Water management & post harvest Techn thru ATMA, FTC's.

Proposed interventions in Ag sector

Agriculture	7	Soil and water conservation practices	1. Enhancing green water storage and use efficency
			3. WIC based irrigation scheduling and fertigation scheduling
	8	Crop intensfication/diversifcation (Green gram, Pigeonpea, sunflower etc)	1.Introducing pre or post harvest crop in the existing cropping system
			2. Introducing altrnative potential crop in the existing cropping system viz, Maize, Pigeonpea, sunflower
	9	Innovative extension system	Tablet based extension system, Video production (15 videos) and Farmer to farmer dissemination
	10	Reuse and recycling of waste water	Decentralise waster water treatment plant and reuse for agriculture

Interventions

Sl. No	Crop	Interventions proposed	Expected increase in Yield (M.Ts)
1.	Chilli	Micro Irrigation , Fertigation, Plastic Mulching, I.P.M & I.N.M., Post Harvest Management.	30%
2.	Tomato	Trellis, Micro Irrigation, Fertigation, Plastic Mulching, I.P.M & I.N.M., Post Harvest Management.	
3.	Gourds	Pendals, Micro Irrigation, Fertigation, Plastic Mulching, I.P.M & I.N.M., Post Harvest Management.	
4.	Mango	Rejuvenation, Canopy Mangement , Water harvesting structures, Micro Irrigation, Plastic Mulching,I.P.M & I.N.M., Post Harvest Management.	

Thank you

Department of Agriculture, Krishna Dist
Department of Horticulture , Krishna Dist
Department of Fisheries. Krishna Dist
Department of Animal Husbandry, Krishna Dist
Department of Planning, Krishna Dist

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

CGIAR

Andhra Pradesh-Primary Sector Mission

(Transforming Agriculture in Andhra Pradesh)

Pilot site Action plan

BY

Nellore District AP Primary Sector Team

Date: 27/04/2015

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Nellore District

- ❖ Geographical area: 13.16 lakh ha
- ❖ Rainfall 1095 mm

Sl No	Total cropped area (kharif)	% in Cultivable Area – Kharif (1,05,850 ha)	Total cropped area-Rabi (2,53,698 ha)	% in Cultivable Area - Rabi
1	Paddy	30-40	Paddy	70-80
2	Acid Lime	10-15	Acid Lime	10-15
3	Groundnut Mangoes Sugarcane Cane	5-10	Tobacco Total, Tobacco Verginia, Blackgram Bengalgram	3-4
4	Cotton	4-5	Greengram, Groundnut	2-3
5	Blackgram	2-3	Sunflower, Maize Seasmum(Gingelly)	1-2
6	Fishery	Ranks I in India		

Process Adopted for Sites Selection and Benchmark Characterization

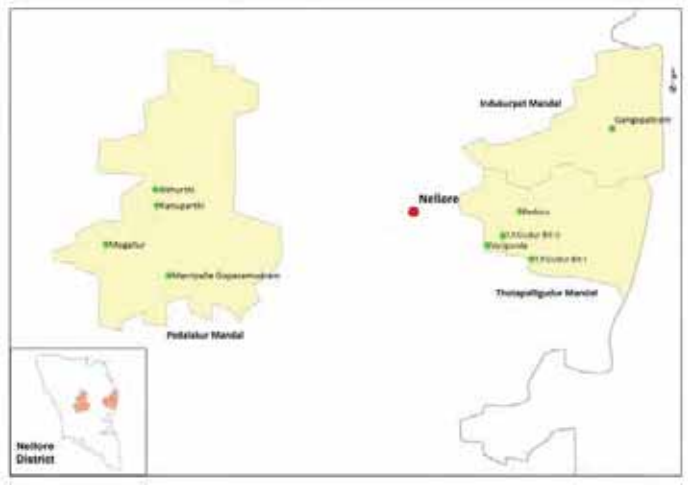
Criteria adopted

- ➢ Representative site for the district
- ➢ Good potential for impact to bridge the gaps
- ➢ Accessibility
- ➢ Willingness to adopt new
- ➢ Presence of suitable institutions
- ➢ Predisposition for change

Process

- ➢ Stakeholders' consultations
  - ▪ District collector
  - ▪ CPO
  - ▪ JD of all line departments
  - ▪ Farmers
- ➢ Consultation with all line Departments
  - ▪ Mandal level staff of all line departments

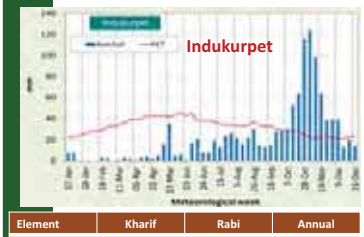
Pilot sites - Location



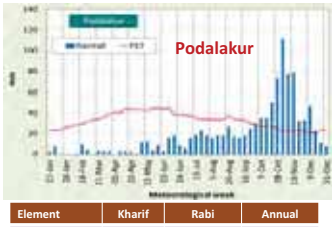
Pilot Sites Details

Sl No	Major type	Mandals covered	Village	Geographical Area in Ha	Village Identified with Area (Ha.)					
					Cultivable Land	Net Area Sown			Horticulture	Fisheries
						Kharif	Rabi	Total		
1	Coastal (3000 Hec.)	Indukurpet	Lebur Bit-II (Jagadevipeta)	1333	1052	856	196	1052	519	48
			Gangapatnam	2347	961	455	170	625	118	231
2	Irrigated belt (4000 Hec.)	T.P.Gudur	Peduru	992	816	631	55	686	16	17
			Varigonda	1332	880	25	654	679	2	45
			T.P.Gudur I	879	510	11	437	448	0	2
			T.P.Gudur II (Papireddy Palem)	956	613	53	418	471	2	24
3	Dry Land (3000 Hec.)	Podalakur	Aldurthi	1461	1129	384	117	501	366	0
			Kanuparthi	1297	992	382	206	588	220	0
			Mogaluru	1145	593	258	219	477	244	0
			Marripalli (Gopasamudram)	405	308	82	44	126	87	0
Total				12147	7854	3137	2516	5653	1574	367

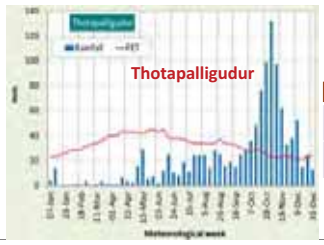
Nellore Sites - Rainfall Pattern



Element	Kharif	Rabi	Annual
PET (mm)	704	415	1688
Rainfall mm)	588	471	1143



Element	Kharif	Rabi	Annual
PET (mm)	704	415	1688
Rainfall mm)	502	448	1010



Element	Kharif	Rabi	Annual
PET (mm)	704	415	1688
Rainfall (mm)	586	488	1151

Field visit and group discussion for constraints identification and Benchmark Characterization

Gangapatnam

Jagadevipeta

Marripalli

Mogaluru

Constraints

Agriculture

- Soil deficient in primary and secondary & micro nutrients
- Soils are saline
- Mono-cropping of paddy
- Labour shortage
- Lack of mechanisation
- High fertilizer usage particularly urea and phosphate
- Fluctuations in market prices
- Predominance of *Kharif* fallow

Horticulture

- Soil deficient in nutrients
- In coconut, irregular bearing, low yield
- Banana prone to diseases particularly panama disease
- Banana susceptible to lodging due to more plant height
- Required tissue culture seedlings in Banana
- Very low area under vegetable cultivation
- Lack of knowledge of improved management practices
- Needs regular capacity building program

Fisheries:

- Lack of quality seeds
- Prevalence of diseases and pest in early stage of growth- Low survival rate
- Unregulated sale of probiotics without assessing the actual need
- Huge knowledge gaps
- Lack of mechanism for modernising the farming techniques
- Lack of Capacity building to bridge yield gaps
- Ignorance towards Rejunivation of fresh water fish culture and prong culture etc
- Lack of processing facility and value addition
  - Lack of godowns
  - Lack of cold storage facilities
- Great fluctuations in market price (Rate should be in line with international/national rates)
- Predominance of middlemen

Livestock

- Low milk yield
- Price fluctuations depending on supply
- Unavailability of quality fodder supply
- Lack of concentrate mixture in cattle diet
- Existing breed in buffalo is graded Murrahwhich is adaptive to local situation
- Need to shared market margins with famers
- Capacity building program needs to be strengthened
- Need to introduce high yielding breed in Sheep and goat
- Need to focus on fodder improvement program particularly on waste land and fallow land

Strategy to increase the productivity

Dept	Sl No	Particulars	Components with details
Agriculture	1	Soil Test based Fertiliser application (80 % area)	1.Allocation of Soil sample targets @ 20 No.s per 500 ha or per village
			2.Training to MAO's & AEO's on the use of GPS during soil sample collection.
			3. Conducting Gramsabhas on soil sample collection
			4. Collection of soil samples covering all the farming situations in the village.
			5.Analysis of soil samples & distribution of Soil health cards
			6. creating awareness to the farmers on the use of Fertilisers based on Soil health status.
			7. Finalising the required Quantities of Micro nutrients
			8. Micro-nutrients Indent placement to Nodal agencies thru DoA
			9. Distribution of defi. micronutrients (Zinc, Boron, Sulphur)
			10. Monitoring for best management prectices
	2	Problematic soils (100 ha)	1. Identification of problematic soils
			2. Create awareness on reclamation of problematic soils
			3. Placing of indents to the nodal agencies
			4.supply of Gypsum / Lime
			5. Supply Green manure seed (Dhiancha, sunhemp, Pillipesara)
			6. Supply ex situ Green manure seed on field bunds (Gliricidia)

Strategy to increase the productivity

Dept	Sl No	Particulars	Components with details
Agriculture	3	Improvement of organic content in soil by Soil Health mgmt	1. Assessment of green manure seed requirement
			2.Placing of Indents to APSSDC
			3. supply of Green manure seeds (200 ha)
			4. Training on importance of Green manure seed
			5.Promotion of vermi compost/beds units (200 nos) and Aerobic composting (1000 nos)
			6.Propagation of N-rich Gliricidia and drumstick on field bunds (10000 seedlings)
	4	Promotion of Quality seed (1000 ha)	1. Identification Farmers for seed multiplication through SVP
			2. Ensuring position of quality seed in private outlets.
			3. Placing of indents to Nodal agencies.
			4. Supply of Foundation / Certified seed through APSSDC.
			5. Promoting improved Paddy varieties under submergence condition (MTU 1061 (**Indra**) for coastal Indukurpet mandal; **NLR 3041 and MTU1075** (Pushyami) for TP Gudur mandal
			6. Supply of Mini-kits of New varieties to the progressive farmers.
	5	Best management practices for enhancing crop Production	1.Create awareness on selection of HYV / pest and disease resistant varieties suitable to their agro climatic conditions.
			2.Organising Demo plots on improved crop production technologies through Chandranna Rythu Kshetrams (CRK), Polambadi & ATMA Demonstrations
			3. Popularising Best Management practices in Rice
			4. Organising training programs on Integrated nutrient/Pest/ Disease /weed

Strategy to increase the productivity

Dept	Sl No	Particulars	Components with details
Agriculture	7	Soil and water conservation practices (100 ha)	1. Enhancing green water storage and use efficency
			2. Identifying suitable places for ex-situ interventions to recharge groundwater aquifer as per water balance approach (based on upstream-downstream analysis)
			3. WIC based irrigation scheduling and fertigation scheduling
	8	Crop intensification/diversifcation (Green gram, Pigeonpea, sunflower etc) (500 ha)	1.Introducing pre or post harvest crop in the existing cropping system
			2. Introducing alternative potential crop in the existing cropping system viz, Maize, Pigeonpea, sunflower
	9	Innovative extension system (All villages)	Tablet based extension system, Video production (15 videos) and Farmer to farmer dissemination
	10	Reuse and recycling of waste water (one unit)	Decentralise waster water treatment plant and reuse for agriculture

Expected (%) increase in Agriculture growth

Sector	Crop	2014-15			2015-16			% increase over 2014-15
		Area	Production	GVA	Area	Production	GVA	
Agriculture	Paddy	6228	46731	65.42	6060	48455	67.84	3.69
	Sugarcane	42	3909	0.90	90	10800	2.48	176.27
	Greengram	225	118	0.54	500	500	2.30	323.76
	Blackgram	295	198	0.86	700	700	3.05	253.85
	Maize	10	35	0.05	300	2250	6.30	12757
	Total	6800	51035	67.84	7705	62670	81.92	20.94

Strategy to increase the productivity

Horticulture	1	Acid lime	1. New area to brought under cultivation with improved varieties (200 ha)
			2. Rejuvenating the old and senile orchards (100 ha)
			3. Application of balanced nutrition including deficient micro nutrients (500 ha)
			4. Water conservation measures i.e drip along with mulching (50 % of irrigated fields)
			5. Plastic crates for transportation (1000 nos)
			6. Pack houses (no.)
	2	Mango	1. New area to brought under cultivation with improved varieties
			2. Rejuvenating the old and senile orchards (50 ha)
			3. Application of balanced nutrition including deficient micro nutrients(100 ha)
			4. Water conservation measures i.e drip along with mulching (50 % of irrigated fields)
			5. Capacity building for minimising post harvest losses during harvesting, transportation and storage
			6. Plastic crates for transportation (200 nos.)
			7. Pack houses (no.)

Strategy to increase the productivity

Horticulture	3	Banana	1. Introduction of new tissue culture varieties (50 ha)
			2. Balanced nutrient management (80 ha)
			3. INM and IPM in banana for local and improved varieties (80 ha)
	4	Chilli, Gourds, Tomato, Leafy vegetables	1. Introduction of new improved cultivars
			2. Balanced nutrient management (200 ha)
	5	Nutrition	Promoting nutri-kitchen Garden kit (200 nos)
	6	Capacity Building	Training on Grading and Packaging of Vegetables
	7	Capacity Building	Exposure visit within state

Expected (%) increase in Horticulture growth

Sector	Crop	2014-15			2015-16			% increase over 2014-15
		Area (ha)	Production (mt)	GVA (crores)	Area (ha)	Production (mt)	GVA (crores)	
Horticulture	Acidlime	871	13936	27.87	900	16280	32.56	16.82
	Banana	159	5088	15.00	200	8000	24.00	57.23
	Mango	86	774	1.16	100	1350	2.03	74.42
	Chillies	30	150	1.2	65	488	3.90	225.00
	Coconut	127	1524000	1.52	155	2015000	2.02	32.22
	Leafy Vegetables	299	5980	5.98	410	10250	10.25	71.40
	Sapota	316	6150	0.17	427	10505	0.26	70.81
	Total	1888		53.17	2257		75.01	41.06
Sericulture		40	6.9	0.15	60	32.04	0.70	364

Strategy to increase the productivity

Fisheries	1	Expansion of area	1. Revival of Brackish water Aquaculture
			2. Revival of Scampi culture
			3. Production of Tilapia culture
			4. Production of sea Bass culture
			5. Production of mangrove crab farming
	2	Mechanisation of Aquaculture	1. Providing solar pump sets, solar lights and aerators
	3	Promotion of deep sea fishing	1. Supply of Boats and nets to marine fisherman
			2. Motorisation of traditional crafts
	4	Stocking of fish seed in tanks and reservoirs	fish seed in tanks under RKVY
			Sea weed culture promotion on expt.al basis

Strategy to increase the productivity

Livestock	10	Feed and fodder assessment and improvement	Feed quality assessment and proper recommendation / Balance Nutrient cards for animal feed
	11		Participatory evaluation of Dual purpose cereal, grasses and legume crops (100 ha)
	12		Promoting improved technology on storability of maize as fodder after harvesting cobs (2 units)
	13		Food and economic security through financial assistance for integrated Giri Raja birds rearing
	14		Capacity building on balanced feeding
	15		Introduction of multipurpose thorn less cactus (Varieties Cactus 1270, Cactus 1271 and Cactus 1280) (500 pads)
Sericulture	16		Expansion of Mulberry Gardens (20 units)
			Soil test based nutrient recommendations
			Sericulture intercropping with Flower/ medicinal
			Encouraging low cost Rearing sheds
			Providing Drip 100% to Mulberry gardens on saturation mode
			Establishment of Private Chawkie Rearing centers
			Evaluation of new races of Bivolitine Hybrid
			Capacity building on rearing and pest management

Expected (%) increase in Fisheries and AHDS growth

Sector	Crop	2014-15			2015-16			% increase over 2014-15
		Area	Production	GVA	Area	Production	GVA	
Fishery	Jadevipeta (Fresh Water)	20	1200	9.6	22	1540	12.32	28.33
	Gangapatnam (Venami)	165	990	29.7	181	2172	65.16	119.39
	Mypadu (Venami)	98	588	17.64	108	1296	38.88	120.41
	Total	283		56.94	311		116.36	104.4
AHDS	Milk	9577	7896	19.74	10056	8790	21.98	11.32
	Meat	47315	258.55	9.049	49818	290	10.15	12.15
	Egg	17272	6.715	0.002	18875	7.25	0.002	7.97
	Total	74164	8161	28.79	78749	9087	32.13	11.60

Summary of expected contribution by pilot site to GVA thru different sub-sectors

Department	GVA (crores)		% increase over 2014-15
	2014-15	2015-16	
Agriculture	67.77	81.97	20.94
AHDS	28.79	32.13	11.60
Fishery	56.94	116.36	104.36
Horticulture	53.17	75.01	41.06
Sericulture	0.15	0.70	364
Total	206.83	306.17	48.03

Thank you

ICRISAT is a member of the CGIAR Consortium

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

FISHERIES

AT A GLANCE SPSR NELLORE DISTRICT

- Length of Coastal line : 169 km
- No. of Coastal mandals : 9
- No. of Coastal fisherman Habitations : 118
- Fishermen Population : 2,45,792
- Active Fisherman : 67250
- Fishing Crafts : 7181

Tanks & Reservoirs :

- Short Seasonal : 386
- Extent : 2204 Ha
- Long Seasonal : 30
- Extent: 757 Ha
- Perennial : 2
- Extent : 86 Ha
- Reservoirs : 7
- Extent : 14462 Ha

Brackish water : 1776 farmers

- Extent : 2554 Ha

BUDGET ALLOTTED TO NELLORE DISTRICT FOR THE YEAR 2015-16

- Schemes under NSP: 1111.02 Lakhs
- Schemes under RKVY : 79 Lakhs
- Schemes under NFDB : 1270.52 Lakhs

FRESH WATER FISH PRODUCTION							
Sl. No	Mandals (jurisdiction)	WSA (Ha)	Production (in tons) during the year 2014-15	GVA (in Crores) during the year 2014-15	WSA (Ha)	Production (in tons) during the year 2015-16	GVA (in Crores) during the year 2015-16
1	2	3	4	5	7	8	9
1	Kavali	3909	145	1.16	3909	174	1.392
2	Bogolu	2174	152	1.216	2174	182.4	1.4592
3	Jaladanki	3100	115	0.92	3100	138	1.104
4	Kondapuram	1240	31	0.248	1240	37.2	0.2976
5	Kaligiri	550	30	0.24	550	36	0.288
6	Buchireddypalem	1380	777	6.216	1380	932.4	7.4592
7	Sangam	7680	4745	37.96	7680	3200	25.6
8	Anumasamudram	35	29	0.232	35	34.8	0.2784
9	Nellore	2801	1550	12.4	2801	1860	14.88
10	Muthukur	1750	1602	12.816	1750	1922.4	15.3792
11	Venkatachalam	2539	2065	16.52	2539	2478	19.824
12	Kovur	1060	1014	8.112	1060	1216.8	9.7344
13	Kodavaluru	768	600	4.8	768	720	5.76
14	Vidavaluru	700	1200	9.6	700	1440	11.52
15	Allur	1912	826	6.608	1912	991.2	7.9296
16	Dagadarthi	900	500	4	900	600	4.8
17	T.P. Gudur	2300	2410	19.28	2300	2892	23.136
18	Indukurpet	2905	2889	23.112	2905	2400	19.2
19	Udayagiri	1245	1386	11.088	1245	1663.2	13.3056
20	Varikuntapadu	900	180	1.44	900	216	1.728

21	Duttaluru	400	120	0.96	400	144	3.152
22	Sitarampuram	804	210	1.68	804	252	5.016
23	Vinjamuru	300	90	0.72	300	108	2.364
24	Gudur	4500	800	6.4	4500	960	7.68
25	Syadapuram	800	695	5.56	800	834	6.672
26	Dakkili	995	850	6.8	995	1020	8.16
27	Balayapalli	1400	1100	8.8	1400	1320	10.56
28	Venkatagiri	2000	1306	10.448	2000	1567.2	12.5376
29	Ananthasagaram	21415	5005	40.04	21415	5006	40.048
30	Kaluvoy	1200	300	2.4	1200	360	2.88
31	Chejerla	900	250	2	900	300	2.4
32	Marripadu	760	350	2.8	760	420	3.36

33	Atmakuru	683	256	2.048	683	307.2	2.457
34	Kota	2300	999	7.992	2300	1198.8	9.5904
35	Vakadu	2548	1100	8.8	2548	1320	10.56
36	Chillakur	2149	1304	10.432	2149	1564.8	12.5184
37	Ozili	1400	697	5.576	1400	836.4	6.6912
38	Chittamuru	2500	920	7.36	2500	800	6.4
39	Naidupeta	1334	760	6.08	1334	912	7.296
40	Sullurpet	1113	420	3.36	1113	594	4.752
41	Tada	680	228	1.824	680	273.6	2.1888
42	Pellakuru	1237	447	3.576	1237	536.4	4.2912
43	D.V.satram	1534	581	4.648	1534	697.2	5.5776
44	Manubolu	3222	326	2.608	3222	391.2	3.1296
45	Podalakuru	687	369	2.952	687	442.8	3.5424
46	Rapur	39603	4530	36.24	39603	6000	48
		136312	**46259**	**370**	**136312**	**51300**	**410**

MARINE FISH PRODUCTION

Sl. No	Mandals (jurisdiction)	Total No. of Crafts	Production (in tons) during the year 2014-15	GVA (in Crores)	Total No. of Crafts	Production (in tons) during the year 2015-16	GVA (in Crores)
1	**2**	3	4		3	4	
1	Kavali	1114	8500	68	1114	10200	81.6
2	Bogole	571	6000	48	571	7200	57.6
3	Indukurpet	487	7000	56	487	8400	67.2
4	T.P.Gudur	158	8000	64	158	9645	77.16
5	Vidavalur	702	5619	44.952	702	6714	53.712
6	Allur	276	4000	32	276	5211	41.688
7	Muthukur	572	9239	73.912	572	1100	8.8
8	Kota	255	9000	72	255	8000	64
9	Vakadu	358	6200	49.6	358	7440	59.52
10	Chillakur	1329	8000	64	1329	9600	76.8
			71558	572		73510	588

Total Prawn Production

Sl. No	Mandals (jurisdiction)	WSA (Ha)	Production (in tons) during the year 2014-15	GVA (in Crores) during the year 2014-15	WSA (Ha)	Production (in tons) during the year 2015-16	GVA (in Crores) during the year 2015-16
1	**2**	3	4	5	6	7	8
1	Kavali	5509	1002	4.509	5509	1400	6.3
2	Bogolu	4792	2300	10.35	4792	2760	12.42
3	Jaladanki	3100	3200	14.4	3100	3840	17.28
4	Kondapuram	1240	3400	15.3	1240	4080	18.36
5	Kaligiri	550	69	0.3105	550	82.8	0.3726
6	Buchireddypalem	1380	10	0.045	1380	12	0.054
7	Sangam	7680	2300	10.35	7680	2760	12.42
8	Anumasamudram	35	12500	56.25	35	15000	67.5

9	Nellore	2801	0	0	2801	0	0
10	Muthukur	1750	3299	14.8455	1750	4500	20.25
11	Venkatachalam	3023	2800	12.6	3023	3360	15.12
12	Kovur	1060	3100	13.95	1060	3720	16.74
13	Kodavaluru	768	3290	14.805	768	3948	17.766
14	Vidavaluru	1200	3400	15.3	1200	4080	18.36
15	Allur	2659	2200	9.9	2659	2640	11.88
16	Dagadarthi	900	2100	9.45	900	4500	20.25
17	T.P. Gudur	3200	1910	8.595	3200	4800	21.6
18	Indukurpet	3855	1600	7.2	3855	2970	13.365
19	Udayagiri	1245	2200	9.9	1245	2640	11.88
20	Varikuntapadu	900	1233	5.5485	900	2800	12.6
21	Duttaluru	400	60	0.27	400	72	0.324
22	Sitarampuram	804	40	0.18	804	48	0.216

23	Vinjamuru	300	38	0.171	300	45.6	0.2052
24	Gudur	4500	70	0.315	4500	84	0.378
25	Syadapuram	800	600	2.7	800	720	3.24
26	Dakkili	995	405	1.8225	995	486	2.187
27	Balayapalli	1400	405	1.8225	1400	486	2.187
28	Venkatagiri	2000	638	2.871	2000	1300	5.85
29	Ananthasagaram	21415	1227	5.5215	21415	2500	11.25
30	Kaluvoy	1200	3200	14.4	1200	3840	17.28
31	Chejerla	900	270	1.215	900	324	1.458
32	Marripadu	760	194	0.873	760	232.8	1.0476
33	Atmakuru	683	358	1.611	683	429.6	1.9332
34	Kota	4110	1103	4.9635	4110	2300	10.35
35	Vakadu	3978	3000	13.5	3978	3600	16.2
36	Chillakur	2149	3111	13.9995	2149	3733.2	16.7994

37	Ozili	1400	1200	5.4	1400	1440		6.48
38	Chittamuru	2956	1933	8.6985	2956	2319.6		10.4382
39	Naidupeta	1334	1400	6.3	1334	1680		7.56
40	Sullurpet	1113	242	1.089	1113	580		2.61
41	Tada	680	274	1.233	680	329		1.4805
42	Pellakuru	1237	167	0.7515	1237	200.4		0.9018
43	D.V.satram	1534	305	1.3725	1534	366		1.647
44	Manubolu	3222	1780	8.01	3222	2136		9.612
45	Podalakuru	687	3400	15.3	687	4080		18.36
46	Rapur	39603	110	0.495	39603	132		0.594
		147807	77443	348.4935	147807	103357		465

TO

DELEGATES OF

PRIMARY SECTOR MISSION

HORTICULTURE DEPARTMENT – SPS NELLORE DISTRICT

PRIMARY SECTOR MISSION-2015-16 SPS Nellore istrict Profile					
Major Horticulture crops Grown in the istrict	Area (Ha) up to (31.3.2015)	Production (MTs)	Productivity (MT/Ha)	Average Market (Price based on 2014-15) Rs/Ton	Total Value.(Rs. In Lakhs) (3*5)
1		3		5	
I.LONG TERM CROPS					
1.	1 8 8	531 0	15	0000	50 3 .00
. a o	10330	0		15000	13 5.50
3. a			1	300000	.00
. t a	3 3	3 8	13.5	15000	55 . 0
5. a ota	380	3800	10	10000	380.00
. a a	1	10	15	10000	1.00
. o o t	501	01 000	1 000 t	1 0000	01. 0
8. l al	10 5	10 50	10	5 5	8 .18
Sub-Total	32768	6418910			73735.78

o t ...

Major Horticulture crops Grown in the istrict	Area(Ha) up to (31.3.2015)	Production (MTs)	Productivity (MT/Ha)	Average Market (Price based on 2014-15) Rs/Ton	Total Value.(Rs. In Lakhs) (3*5)
1		3		5	
II.SHORT TERM CROPS					
1. a a a o al	13	0	35	10000	.00
.T. . a a a	100	5000	50	0000	1000.00
3. a a a	100	8000	80	5000	00.00
. To ato		1 0	0	10000	1 .00
5. ll	1 8	30	5	0000	3858.00
. ll		555	8	10000	555. 0
.T	100	00		80000	80.00
8. at lo	50	000	0	5000	50.00
. lo	50	500	10	5000	5.00
10. . o t t t	3	5 0	0	10000	5 .00
11. lo o t t t	350	1 00		0000	5 0.00
1 . ola a a	850	800	8	10000	80.00
Sub-Total	8101	145532			18233.20
Grand Total	40869	6564442			91968.9775

PRIMARY SECTOR MISSION (HORTICULTURE)- 2015-16

Additional Area Proposed during 2015-16 to Achieve ouble igit Growth (i.e.30%)on the existing ist.G P

Name of the istrict: SPS Nellore

Sl. No	Name of the Crop	Units No/ sqmt/ Ha	Additional Area Proposed (Ha) (2015-16)	Expected increase in Production by following Interventions (MTs/Ha)	Expected increase in Productivity by following Interventions (MTs/Ha)	Average Market Price(Rs. Mts) (based on 2014-15 prices)	Total value(Rs. in Lakhs) (6*8)	Financial Budget requirement (Rs. in Lakhs)	Interventions proposed to increase Production/ Productivity
1		3		5			8		10
I.LONG TERM CROPS									
1	a o	a	00	1 55	3	15000	3	1555.1	o a t l ato a o to o l l t o t a tlo
		a	1 50	55000	5	0000	11000	5 5	o a t l ato o t ta l ato a o to o l l t o t a tlo
	Sub-Total		1450	96955		35000	17293	4130.1	

o t ...

Sl. No	Name of the Crop	Units No/ sqmt/ Ha	Additional Area Proposed (Ha) (2015-16)	Expected increase in Production by following Interventions (MTs/Ha)	Expected increase in Productivity by following Interventions (MTs/Ha)	Average Market Price(Rs. Mts) (based on 2014-15 prices)	Total value(Rs. in Lakhs) (6*8)	Financial Budget requirement (Rs. in Lakhs)	Interventions proposed to increase Production/Productivity
1	2	3	4	5	6	7	8	9	10
II.SHORT TERM CROPS									
3	T. . a a a	a	100	31 0	50	0000	88	1 .0	o to o 100 l ato l l t
	a a a	a	300	30000	100	10000	3000	8 .8	o to o 100 l ato l l t
5	ll	a	000	30000	.5	0000	1000	31	o a a o to o l l t
	o	a	300	18000	0	15000	00	50	o a a t a al o a o
	Sub-Total		4700	109440		115000	32988	1470.84	
	Grand Total		6150	206395		150000	50281	5600.94	

INTERVENTIONS TO INCREASE YIEL S OF MAJOR HORTICULTURE CROPS IN SPS NELLORE ISTRICT

Sl. No	Crop	Present Yield	Increased yield due to interventions	% of increase	Interventions
1	Acid Lime	15 Ton/ Ha	20 Ton	33%	uality plant material rip Rejuvenation Mulching Micro Nutrient application IPM/INM techniques Minimi ation of Post harvest losses Conduct of awareness programmes Exposure visits to farmers
2	Mango	9 Ton / Ha	12 Ton	30%	Rejuvenation rip Mulching IPM/INM techniques Mulching Minimi ation of Post harvest losses Conduct of awareness programmes Exposure visits to farmers
3	Banana (T.C)	35 Ton / Ha	50 Ton	42%	T.C. Banana High ensity rip Mulching IPM/INM techniques Conduct of awareness programmes Exposure visits to farmers
4	Papaya	80 Ton / Ha	100 Ton	25%	Viral resistant varieties IPM rip Fertigation Mulching Conduct of awareness programmes Exposure visits to farmers
5	Gourds	35 Ton	60 Ton / Ha	70%	rip Irrigation Permanent pandals Conduct of awareness programmes Exposure visits to farmers

Major Constraints and proposed interventions in Acid Lime in SPS Nellore district

Area (Ha)	Constraints/Issues	Interventions
1 000	o a t o o la t at al o o o at . l o oot ot a t o l o t t . a at al a o t a o tat o o t lat a t.	l a t o to o o l to a t at tl llo . To o tt a a a a a to t o a a to a ll o . o to o la t at a t o la o a . o oto o a tto o at tot a .

THANK YOU

FISHERIES- VIZIANAGARAM DISTRICT ACTION PLAN 2015-16

FISHERIES- VIZIANAGARAM: DISTRICT RESOURCES

Sl. No	Water Bodies	No.	Extent (H)	Expected Production (T)
	Freshwater :			
1	MI & GP Tanks	6159	31969	12510
2	Reservoirs	8	3814	1644
3	FW Aquaculture Ponds	28	73	146
	Brackish water :			
4	BW Aquaculture Ponds & Revival of Abandoned Ponds	51	50	250
	Marine Sector : 28 Km Coast Line			
5	Marine Fish			16320
6	Marine Shrimp			1010
	TOTAL	**6246**	**35906**	**31880**

FISHERIES- VIZIANAGARAM: DISTRICT PRODUCTION : 2014-15 & 2015-16

S. No	Water Resources	2014-15		2015-16	
	Freshwater :	Prod. (T)	Value (Rs) Cr.)	Prod. (T)	Value (Rs) Cr.)
1	MI & GP Tanks	9600	69.40	12510	128.02
2	Reservoirs	600	12.00	1644	41.10
3	FW Aquaculture Ponds	100	1.00	146	14.60
	Brackish water :				
4	BW Aquaculture Ponds & Revival of Abandoned Ponds	138	3.036	250	6.12
	Marine Sector : 28 Km Coast Line				
5	Marine Fish	15607	171.67	16320	179.52
6	Marine Shrimp	900	10.74	1010	12.12
	TOTAL	**28155**	**291.50**	**31880**	**381.48**

FISHERIES- VIZIANAGARAM DISTRICT : MANDAL WISE PRODUCTION ACTION PLAN 2015-16

		2014-15					TOTAL 2014-15	2015-16 PRODUCTION (T)					TOTAL 2015-16	2015-16 Value (Rs lakhs)					
		Inland Fish	Marine Fish	Scampi	Marine Shrimp	BW Shrimp		Inland Fish	Marine Fish	FW Scampi	Marine Shrimp	BW Shrimp		Inland Fish	Marine Fish	FW Scampi	Marine Shrimp	BW Shrimp	TOTAL value
1	3																		
1	Vizianagaram	126	0	11	0	0	137	149	0	18	0	0	168	164	0	44	0	0	208
2	Gajapathinagaram	181	0	17	0	0	198	215	0	28	0	0	243	236	0	68	0	0	304
3	Gurla	142.2	0	17	0	0	159.2	169	0	28	0	0	197	186	0	68	0	0	254
4	Mentada	206	0	24	0	0	230	244	0	40	0	0	284	269	0	96	0	0	365
5	Dattirajeru	201	0	18	0	0	219	238	0	30	0	0	268	262	0	72	0	0	334
6	Cheepurupalli	56	0	5	0	0	61	66	0	8	0	0	75	73	0	20	0	0	93
7	Bondapalli	282.8	0	25	0	0	307.8	335	0	41	0	0	377	369	0	100	0	0	469
8	GARIVIDI	160.4	0	14	0	0	174.4	190	0	23	0	0	213	209	0	56	0	0	265
9	NELLIMARLA	126	0	12	0	0	138	149	0	20	0	0	169	164	0	48	0	0	212
10	MERAKA MUDIDAM	41	0	4	0	0	45	49	0	7	0	0	55	54	0	16	0	0	70
11	JAMI	211	0	17	0	0	228	250	0	28	0	0	278	275	0	68	0	0	343
12	L.KOTA	728	0	59	0	0	787	864	0	98	0	0	961	950	0	236	0	0	1186
13	GANTYADA	563.4	0	47	0	0	610.4	668	0	78	0	0	746	735	0	188	0	0	923
14	VEPADA	467	0	39	0	0	506	554	0	64	0	0	618	609	0	156	0	0	765
15	S.KOTA	233	0	19	0	0	252	276	0	31	0	0	308	304	0	76	0	0	380
16	KOTHAVALASA	250	0	21	0	0	271	297	0	35	0	0	331	326	0	84	0	0	410
17	DENKADA	457	0	35	0	0	492	542	0	58	0	0	600	596	0	140	0	0	736

FISHERIES- VIZIANAGARAM DISTRICT : MANDAL WISE PRODUCTION ACTION PLAN 2015-16 Contd……

		2014-15					TOTAL 2014-15	2015-16 PRODUCTION (T)					TOTAL 2015-16	2015-16 Value (Rs lakhs)					
		Inland Fish	Marine Fish	Scampi	Marine Shrimp	BW Shrimp		Inland Fish	Marine Fish	FW Scampi	Marine Shrimp	BW Shrimp		Inland Fish	Marine Fish	FW Scampi	Marine Shrimp	BW Shrimp	TOTAL value
18	Bhogapuram	234	5440	18	320	58	6070	278	5600	30	350	105	6362	305	6160	72	420	263	7220
19	Pusapatirega	367	10167	28	580	80	11222	435	10720	46	660	145	12007	479	11792	112	792	363	13537
20	Salur	775	0	213	0	0	988	919	0	352	0	0	1272	1011	0	852	0	0	1863
21	Pachipenta	454	0	77	0	0	531	539	0	127	0	0	666	592	0	308	0	0	900
22	Makkuva	351	0	152	0	0	503	416	0	251	0	0	668	458	0	608	0	0	1066
23	Ramabhadrapuram	317	0	60	0	0	377	376	0	99	0	0	475	414	0	240	0	0	654
24	Pavarthipuram	589	0	40	0	0	629	699	0	66	0	0	765	769	0	160	0	0	929
25	Seetanagaram	379	0	26	0	0	405	450	0	43	0	0	493	495	0	104	0	0	599
26	Garugubilli	371	0	25	0	0	396	440	0	41	0	0	481	484	0	100	0	0	584
27	Komarada	201	0	14	0	0	215	238	0	23	0	0	262	262	0	56	0	0	318
28	Bobbili	301	0	24	0	0	325	357	0	40	0	0	397	393	0	96	0	0	489
29	Balijipeta	386	0	30	0	0	416	458	0	50	0	0	508	504	0	120	0	0	624
30	Badangi	252	0	20	0	0	272	299	0	33	0	0	332	329	0	80	0	0	409
31	Therlam	331	0	27	0	0	358	393	0	45	0	0	437	432	0	108	0	0	540
32	Kurapam	142	0	18	0	0	160	168	0	30	0	0	198	185	0	72	0	0	257
33	Jiyyammavalasa	361	0	42	0	0	403	428	0	69	0	0	498	471	0	168	0	0	639
34	G.L.Puram	126	0	12	0	0	138	149	0	20	0	0	169	164	0	48	0	0	212
	TOTAL	**10368.8**	**15607**	**1210**	**900**	**138**	**28223.8**	**12301**	**16320**	**2000**	**1010**	**250**	**31881**	**13531**	**17952**	**4841**	**1212**	**625**	**38160**

FISHERIES- VIZIANAGARAM DISTRICT :CONSTRAINTS/GAPS

Sl. No	Water Bodies	CONSTRAINTS
A	**Freshwater :**	
	MI & GP Tanks	Mostly Rain Fed tanks, Silted, Seasonal, Under stocking of Fish Seed, No supplement feed, Mostly under Fisheries Co-op fold.
	Reservoirs	-Do-
	FW Aquaculture Ponds	Private Entrepreneurs are now venturing the District. There is a scope for development .
B	**Brackish water** :	
	BW Aquaculture Ponds & Revival of Abandoned Ponds	Very Small stretch of BW Aqua Zone, Many ponds abandoned ,
C	**Marine Sector : 28 Km Coast Line**	No Berthing Facilitates (Jetties), depended on Coastal Fishery only, No off shore fishing , No Cold Storage facility, Many Traditional Crafts(476) & Motorised Crafts (352)

FISHERIES- VIZIANAGARAM DISTRICT :INTERVENTIONS PROPOSED

No	Water Bodies	INTERVENTIONS
A	**FW Fisheries** 1.MI & GP Tanks	De-silting & Strengthening of all water bodies through MGNRGS/Irrigation Dept.; Rearing of Adv. Fingerlings ; Establishment of Captive Nurseries; Stocking of all water bodies with 2000 Fls of IMCs & 1000-5000 Scampi ; Supplementary feed; Bank Loans/Budget for Working Capital to FCSs ;
	2.Reservoirs	-Do-; Introduction of Cage Culture technology (GIFT/ Pangasius);Landing & marketing facilities
	3.FW Aquaculture	Private Entrepreneurs are now venturing the District. There is a scope for development . Subsidy Schemes/bank Loans/Insurance
B	**Brackish water :**	Revival of abandoned ponds; Alternate species, Sea Bass, Mud Crab etc.,
C	**Marine Sector :**	Berthing Facilitates (Jetties), off shore fishing through introduction of vessels;Tuna Long Lining; , Cold Storage facility, Motorisation of Traditional Crafts with subsidy on OBMs & ST Exemption for all Motorised Crafts; Establishment of FADs/Artificial Reefs ; Value Addition(Dry Fish Platforms/);Sea Weed Culture; Cage Culture ;Sea ranching.

Stocking of Fry Size Fish

Reared Fingerling size fish

Fish Harvest

Marine Fishing Boat under RKVY

BW Aquaculture Pond

Inspection of Freshwater Aquaculture Pond

Fish Marketing

View of Peddagadda Reservoir

Cage Culture Technology- Interstate Exposure Visit to Chattisgarh –ATMA,VZM

Sea Weed Culture – Demonstration Under NFDB

Fish/Prawn Value Addition

Thank you,all

GROWTH ENGINES -2015-16

VIZIANAGARAM DISTRICT

Department of Agriculture
Vizianagaram district

Joint Director of Agriculture
Vizianagaram

VIZIANAGARAM DISTRICT - AGRICULTURE PROFILE

S No	Category	Area in Ha
1	Total Geographical Area	653900
2	Gross Cropped Area	373235
3	Net Cropped Area	273928
4	Gross Irrigated Area	153998
5	Net irrigated Area	121030
6	Number of Farm Holdings	
	i) Marginal	324099
	ii) Small	68272
	iii) Others	36868
7	Total area operated by	
	i) Marginal	151091
	ii) Small	117627
	iii) Others	160678
8	Average Annual Rainfall	1130.7
9	Cropping Intensity	73.39
10	Irrigation Intensity	78.59

RAINFALL (SWM) (1-6-2014 TO 30-09-2014)

Rainfall :Annual rainfall (normal) : 1218 mm.

S. No	Month	Normal	Actual	% of dev
	Southwest monsoon			
1	June	128.4	55.1	-57.1
2	July	178.7	143.3	-19.8
3	Aug'14	195.1	271.8	39.3
4	Sept,2014	190.5	155.3	-18.5
	North east monsoon			
5	Oct,2014	167.9	250.7	49.3
6	Nov'2014	73.3	9.2	-87.4
7	Dec'2014	4.6	8.9	93.5
8	Jan2015(up to 09.04.2015)	63.5	30.5	-51.96
	Grand Total	1002.0	924.8	-7.7

Double Digit Growth

Action Plan for the year 2015-16

CROP-WISE IDENTIFIED GROWTH ENGINES IN VIZIANAGARAM DISTRICT

CROP-WISE IDENTIFIED GROWTH ENGINES IN VIZIANAGARAM DISTRICT										
Sl No	Crop	2014-15			2015-16			GVA Over 2014-15	% increase
		Area (ha)	Production (MTS)	GV (In Crores)	Area (ha)	Production (MTS)	GVA (In Crores)		
1	PADDY	124568	473358	739	133019	518774	863.92	124.92	16.9
2	Sugarcane	17820	1176120	298	19820	1327940	361.65	63.65	21.4
3	Maize	30302	141813	214	31315	147963	233.47	19.47	9.1
4	Cotton	15256	5614	21	16323	6741	25.28	4.28	20.4
5	Blackgram	18201	10684	57	18500	15004	82.28	25.28	44.4
6	Greengram	14750	7183	36	15600	10218	52.88	16.88	46.9
7	Groundnut	8206	17413	80	8600	18705	88.43	8.43	10.5
8	Redgram	1040	807	4	1240	992	5.16	1.16	29.0
9	Sesamum	22516	6034	33	23500	8061	43.92	10.92	33.1
10	Mesta	4078	6929	19	4200	7350	20.91	1	5.3
11	Tobacco	535	321	3	546	341	2.80	0.71	23.7
	TOTAL	257272	1846277	1502	272663	2062089	1781	279	18.6

Statement showing the crop wise projection of area and productivity during 2015-16

Crop	Area (Ha) 2014-15	Yield Kg/Ha 2014-15	Area (Ha) projected 2015-16	Yield Kg/Ha projected 2015-16
Paddy	124568	3800	133019	3900
Sugarcane	17820	66000	19820	67000
Maize	30302	4680	31315	4725
Cotton	15256	368	16323	413
Blackgram	18201	587	18500	811
Greengram	14750	487	15600	655
Groundnut	8206	2122	8600	2175
Redgram	1040	776	1240	800
Sesamam	22516	268	23500	343
Mesta	4078	1699	4200	1750
Tobacco	535	600	546	625

Statement showing the Mandal wise crop Area & Production projection during 2015-16

Sl. No.	Name of the Mandal	Paddy		Maize		Green gram		Black gram		Red gram	
		Area in Ha	Production in MTS	Area in Ha	Production in MTS	Area in Ha	Production in MTS	Area in Ha	Production in MTS	Area in Ha	Production in MTS
1	Komarada	3830	14939	561	2651	421	276	377	306	30	24
2	G.L.Puram	2344	9144	51	240	44	29	60	49	380	304
3	Kurupam	3969	15478	94	442	57	37	122	99	215	172
4	Jiyyammavalasa	6987	27251	32	149	124	81	139	113	105	84
5	Garugubilli	6333	24698	4	19	294	193	1283	1040	7	6
6	Parvathipuram	6363	24816	1039	4908	402	263	1443	1171	19	15
7	Makkuva	4491	17515	1281	6051	408	267	421	341	14	11
8	Seethanagaram	6194	24159	54	255	627	411	558	453	18	14
9	Balijipeta	6626	25840	131	619	1638	1073	908	736	0	0
10	Bobbili	6943	27079	67	317	421	276	489	396	14	11
11	Saluru	2654	10351	2963	13998	163	107	202	164	130	104
12	Pachipenta	2207	8608	2818	13316	74	48	133	108	74	59
13	Ramabhadrapuram	2228	8689	933	4408	115	76	257	209	78	62
14	Badangi	2277	8880	24	115	203	133	236	191	0	0
15	Therlam	3973	15497	434	2051	406	266	285	231	0	0
16	Merakamudidam	2778	10833	1234	5830	555	364	747	606	41	32
17	Dattirajeru	3925	15309	794	3750	575	377	749	608	45	36
18	Mentada	4122	16078	448	2118	517	339	439	356	0	0
19	Gajapathinagaram	3787	14770	460	2175	412	270	429	348	38	31
20	Garividi	1676	6537	4223	19953	477	312	538	436	0	0
21	Cheepurupalli	3648	14226	3222	15223	383	251	239	194	4	3
22	Gurla	5870	22893	2661	12572	281	184	317	257	0	0
23	Bondapalli	3096	12075	64	303	575	377	648	526	0	0
24	Gantyada	5578	21754	28	134	1105	724	2246	1822	4	3
25	S.Kota	4117	16055	40	187	1285	842	1221	990	7	6
26	Vepada	3470	13532	0	0	772	506	793	643	0	0
27	L.Kota	4370	17045	0	0	618	405	673	546	2	2
28	Kothavalasa	1268	4946	6	29	99	65	211	171	0	0
29	Jami	4532	17675	240	1133	715	468	854	692	0	0
30	Vizianagaram	1677	6540	40	187	309	202	337	274	0	0
31	Nellimarla	3662	14281	1997	9436	217	142	294	238	0	0
32	Pusapatirega	4136	16131	3502	16548	190	125	177	143	0	0
33	Denkada	2636	10279	1228	5801	751	492	295	239	1	1
34	Bhogapuram	1249	4870	644	3045	364	238	380	308	14	11
	DIST. TOTAL	133019	518774	31315	147963	15600	10218	18500	15004	1240	992

Statement showing the Mandal wise crop Area & Production projection during 2015-16

Sl. No.	Name of the Mandal	Sugar cane		Cotton		Mesta		Ground nut		Sesamum		Tobacco	
		Area in Ha	Production in MTS	Area in Ha	Production in MTS	Area in Ha	Production in MTS	Area in Ha	Production in MTS	Area in Ha	Production in MTS	Area in Ha	Production in MTS
1	Komarada	157	10503	1344	555	8	14	27	59	498	171	0	0
2	G.L.Puram	7	445	513	212	0	0	32	71	45	15	0	0
3	Kurupam	57	3827	465	192	1	2	9	21	87	30	0	0
4	Jiyyammavalasa	308	20650	402	166	10	18	45	98	3112	1068	0	0
5	Garugubilli	100	6676	2	1	286	501	15	32	2329	799	0	0
6	Parvathipuram	271	18158	21	9	84	148	40	87	1054	362	0	0
7	Makkuva	983	65867	225	93	125	218	63	137	475	163	0	0
8	Seethanagaram	2185	146421	177	73	525	919	77	166	290	99	0	0
9	Balijipeta	318	21273	562	232	1059	1853	449	976	722	247	0	0
10	Bobbili	2205	147757	374	155	639	1117	43	93	387	133	0	0
11	Saluru	712	47709	3636	1502	4	7	8	18	74	25	67	42
12	Pachipenta	465	31153	2209	912	0	0	151	328	20	7	424	265
13	Ramabhadrapuram	1222	81889	2437	1007	252	442	231	501	100	34	5	3
14	Badangi	4152	278156	348	144	335	586	306	666	440	151	0	0
15	Therlam	717	48065	1907	787	335	586	1798	3912	221	76	0	0
16	Merakamudidam	282	18870	186	77	2	4	1471	3200	1120	384	20	13
17	Dattirajeru	258	17268	614	254	150	263	425	925	1314	451	17	11
18	Mentada	243	16289	106	44	0	0	0	0	113	39	0	0
19	Gajapathinagaram	232	15577	67	28	277	485	54	119	372	127	0	0
20	Garividi	206	13797	16	7	0	0	225	490	567	194	3	2
21	Cheepurupalli	522	34981	523	216	5	9	607	1320	543	186	0	0
22	Gurla	16	1068	6	3	0	0	475	1033	1824	626	0	0
23	Bondapalli	142	9524	4	2	92	160	13	27	140	48	0	0
24	Gantyada	128	8545	0	0	0	0	0	0	120	41	0	0
25	S.Kota	1253	83936	0	0	0	0	3	7	508	174	0	0
26	Vepada	304	20383	0	0	0	0	56	121	483	166	0	0
27	L.Kota	147	9880	0	0	0	0	89	194	529	181	0	0
28	Kothavalasa	0	0	0	0	0	0	7	16	778	267	0	0
29	Jami	2059	137965	0	0	0	0	0	0	1046	359	0	0
30	Vizianagaram	65	4361	0	0	10	18	14	30	250	86	0	0
31	Nellimarla	45	3026	89	37	0	0	85	185	655	225	0	0
32	Pusapatirega	52	3471	0	0	0	0	497	1080	2152	738	9	6
33	Denkada	7	445	41	17	0	0	200	435	746	256	0	0
34	Bhogapuram	0	0	48	20	0	0	1085	2359	386	132	0	0
	DIST. TOTAL	19820	1327940	16323	6741	4200	7350	8600	18705	###	8061	546	341

S. No.	Name of the Crop/Season 2015-16	Interventions Proposed	Area Proposed in Ha		Departmental schemes to be converged
			Area sown	Area proposed	
1	PADDY	1. Supply of high yield variety seeds	133019	30000	NFSM, SVP,CRK'S , MINIKITS POLAMBADI, ATMA,FTC,
		2. Seed treatment		10000	
		3. Direct sowing		8800	
		4. Direct sowing with Drum Seeder		5000	
		5. Machine transplanting		500	
		6. Weedcide application		1000	
		7. Micro nutrient application		10000	
		8. Application of Urea mixed with Neem Oil		2000	
		9. Red gram on Rice bunds		600	
		10. Application of Liquid Biofertilizers		1000	
		11. Training programmes to be conducted in all schemes			

S.No.	Name of the Crop/Seasoon 2015-16	Interventions Proposed	Area Proposed in Ha		Departmental schemes to be converged
			Area sown	Area proposed	
2	MAIZE	1.Direct sowing with Seed cum Ferti. Drill	31315	2000	CRK'S,ATMA, RADP
		2. Weedcide application		2000	
		3. Micro nutrient application		1000	
		4. Training programmes on INM / IPM measures		---	

S.No.	Name of the Crop/Season KHARIF 2015-16	Interventions Proposed	Area Proposed in Ha		Departmental schemes to be converged
			Area sown	Area proposed	
3	GROUND NUT	1. Supply of high yield variety seeds	8600	2000	NMOOP OIL SEEDS,SVP
		2. Use of SSP		200	
		3. Micro nutrient application		500	
		4. Sowing with Seed Drill		50	
		5. Seed treatment with Dithane M – 45, T.Viridi & Thiram		50	
		6. Training programmes on INM / IPM measures		---	

S.No.	Name of the Crop/Season 2015-16	Interventions Proposed	Area Proposed in Ha		Departmental schemes to be converged
			Area sown	Area proposed	
4	GREEN GRAM	1. Supply of high yield variety seeds 2. Seed treatment 3. Weedcide application 4. Micro nutrient application 5. ICM practices 6. Training programmes on INM / IPM measures	15600	1000 50 50 100 50 ---	SVP ,NFSM, FTC

S.No.	Name of the Crop/Season 2015-16	Interventions Proposed	Area Proposed in Ha		Departmental schemes to be converged
			Area sown	Area proposed	
5	BLACK GRAM	1. Supply of high yield variety seeds 2. Seed treatment 3. Weedcide application 4. Micro nutrient application 5. ICM practices 6. Training programmes on INM / IPM measures	18500	1000 50 50 100 50 ---	SVP ,NFSM, FTC

S.No.	Name of the Crop/Season KHARIF 2015-16	Interventions Proposed	Area Proposed in Ha		Departmental schemes to be converged
			Area sown	Area proposed	
6	COTTON	1. Micro nutrient application or Magnesium spray 2. Sowing of Green manure (Pilli pesara) prior to line sowing of cotton 3. Training programmes on INM / IPM for capacity enhancement	16323	1000 50 --- 	ATMA DEMO'S NFSM ATMA

S.No.	Name of the Crop/Season KHARIF 2015-16	Interventions Proposed	Area Proposed in Ha		Departmental schemes to be converged
			Area sown	Area proposed	
7	REDGRAM	1. Use of High yielding varieties 2. Maintainance of optimum plant population 3. Adoption of IPM practices 4. Training Programmes on IPM practices	1 0	00 50 00	NFSM-Pulses ATMA AND FTC

S.No.	Name of the Crop/Season KHARIF 2015-16	Interventions Proposed	Area Proposed in Ha		Departmental schemes to be converged
			Area sown	Area proposed	
8	SUGARCANE	1. Usage of high yielding varieties 2. Paired row method of planting with pulses inter-cropping 3. Weedicide application 4. Trash Mulching 5. Set treatment with Malathian, Hexa conazole or propioconazole 6. Micro nutrient application 7. Release of Trico-cards to control shoot borer 8. Training programmes on INM / IPM measures	19820	400 400 1000 200 100 200 200 ---	SUGAR FACTORY

epartmental schemes to be converged:

Seed village scheme

Polam pilustundi

Chandranna Rythu kshetralu

1. 

NFSM

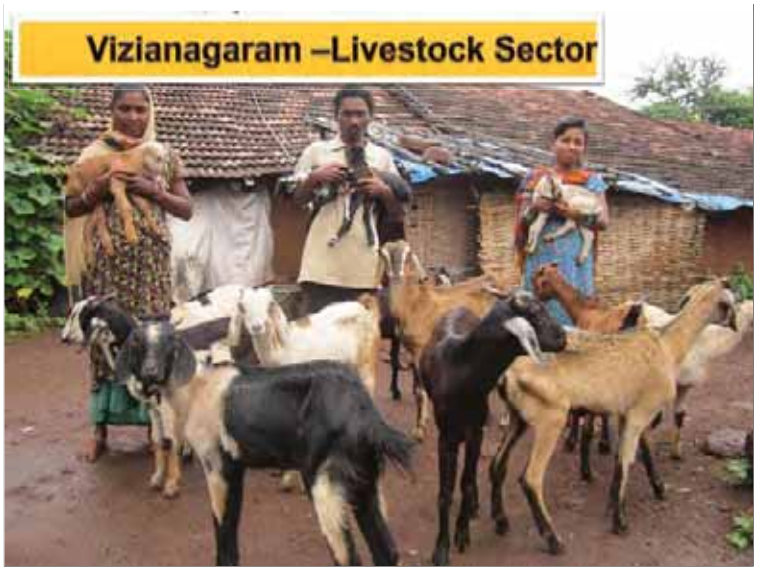
2. Farm mechanisation

1. 

Organic farming

THANK YOU

JOINT DIRECTOR OF AGRICULTURE
VIZIANAGARAM



INTERVENTIONS PROPOSE IN ANIMAL HUSBAN RY SECTOR FOR INCREASE OF GS P URING 2015-16 IN VI IANAGARAM ISTRICT

(Estimated yearly growth @ 12.53% of Milk, 12.81% of Meat & 10.89 % of Egg production.)

MIL PRO UCTION: T t t to t .3 la a l o o lat o o .3 T o l a . T l o to ll a to . T t t ollo t to .

- **Existing genetic potential of milch animals can be tapped by reducing inter calving with Suphalam , Ksheerasagara, Sunandini Progremmes, promoting fodder development on large scale and supply of concentrate feed to elite animals apart from animal health care activities and capacity building of farmers by investing Rs 50.15 Cr .**

The value of Milk out put can be increased by Rs 219.8 cr during 2015-16 in addition to the present status.

MEAT PRODUCTION: T t t a a o t la a oat o lat o a t a o o t a o to a a la lt o a a a a o la o t a a . la o t o a o o o al a a a o lt o to . lt a o o to a at o to to 8 T 015 1 o t t o to t ollo a by investing Rs 19.24 Cr.

- Establishing 680 Mini Sheep and Goat Units in the district.
- By distribution of 340 Breeding Ram to avoid inbreeding and to promote growth.
- Periodical deworming and vaccination to poultry, Sheep and Goat in a campaign mode to attain early body weights and also decrease the mortality apart from Health camps
- Establishment of New Commercial poultry units [143 broiler (1000cap) and 12 (10000 cap) Layer Units] and 3400 Rural Backyard poultry units to Rural Self help group women to increase the meat production.
- Capacity building to shepherds on better management to increase the meat production effectively.

The value of Meat production will be increased by Rs 38.63Cr during 2015-16 in addition to present status.

EGG PRODUCTION:

- Proposed to increase egg production to 3360.9 lakh No by 2015-16 from the present production by Encouraging establishment of 12 new commercial layer(10000cap) under EDEG component of National Livestock Mission.
- Supply of 3400 backyard poultry units to SHG women and Rural poor under various Schemes & regular periodical vaccination and Deworming.

The value of Egg production will be increased by Rs 17.48 Cr additionally with an investment of Rs 8.91 Cr which is already included in funds requirement for meat production

VIZIANAGARAM DISTRICT - LIVE STOCK SECTOR

(MILK, MEAT & EGG)

Planned to generate an income of Rs. 1626.57 Crores from Milk, Meat and Egg production during 2015-16 with an average annual production growth rate of 12.53% in Milk and of 12.8%in Meat and 10.91 % in Eggs

Proposed Activity	Status as on 13-14	GVA for 13-14 Rs in cr	Present status as on 14-15	GVA for 14-15 Rs in Cr	Interventions	Amount required in Cr for 2015-16	Output by 2015-16	GVA for 15-16 Rs in Cr
Enhancement of Milk Production	4.14 LMT of Milk	856	4.39 LMT of milk	965.80	Suphalam , Ksheerasagara Sunandini Progremmes Fodder development on Large scale and supply of concentrated feed apart from animal health activities and capacity building of farmers	50.15	Production of 4.94 LMT of milk	1185.60
Enhancement of Meat Production	18277. 58 MT of Meat	230	20103 MT of meat	301.55	Establishment of New Sheep and Goat units, new poultry units, Rural Backyard poultry units under NLM, Periodical deworming and vaccination to poultry, Sheep and Goat,	19.24	Production of 22678 Mt of Meat	340.17
Enhancement of EGG Production	2865 lakhs Eggs	66	3030 lakh eggs	83.32	Establishment of new commercial layer and grower farms & Rural Backyard poultry units under NLM	8.91	Production of 3360.9 lakhs No of eggs	100.80
TOTAL		1250		1350.67		69.39		1626.57

Total GVA 2014-15 : 1350.67 Cr.
Total GVA 2015-16 : 1626.57Cr.
Increase GVA : 275.90 Cr.

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Milk Production

Sl.No	Name of the Proposed Activity	No.of Units Proposed per year	Unit Cost	Subsidy	Bank loan	Beneficiary share	Total Amount required Rs in Crores per year	Amount required Rs in Crs for subsidy	Funds proposed under
1	Suphalam	46000	1000	1000	0	0	4.6000	4.6000	Dist funds
2	Ksheerasagar	11500	9000	5260	0	3740	10.3500	6.0490	Dept funds
3	Sunandini	8900	15000	11500	0	3500	13.3500	10.2350	Dept funds
4	Feed supply to 50% of the suphalam animals	23000	5220	3915	0	1305	12.0060	9.0045	Dist funds
5	Feed supply to 5% of the breedable population (Elite Pop)	11500	5220	3915	0	1305	6.0030	4.5023	Dist funds
6	Perennial Fodder Production	340 ac	28420	28420	0	0	09663	0.9663	MGNREGS
7	Seasonal Fodder dev	3400 ac	1074	1074	0	0	0.3652	0.3652	Dept funds
8	Health care activities i.e FMD, Calf deworming				0	0	1.8400	1.8400	Dept funds
9	Capacity building of farmers	27000	250	250	0	0	0.6750	0.6750	Dist funds
	Grand Total						**50.1554**	**38.2372**	

Meat Production:

Sl.No	Name of the Proposed Activity	No.of Units Proposed per year	Unit Cost	Subsidy	Bank loan	Beneficiary share	Total Amount required Rs in lakhs per year	Amount required Rs in Crs for subsidy	Funds proposed from
1	Establishment of Sheep and goat units (10+1)	680	60000	15000	39000	6000	4.0800	1.0200	Dept funds (NLM)
2	Supply of breeding rams	340	10000	5000		5000	0.3400	0.1700	Dist funds
3	Health care activities i.e Sheep and Goat deworming, Health camps				0	0	1.0000	1.0000	Dept funds
4	Sheep insurance	59000	288	192		96	1.6992	1.1328	Dept funds
5	Establishment of Rural Backyard poultry units (@45chicks)	3400	2700	1800		900	0.9180	0.6120	Dept funds
6	Establishment of Commercial Broiler units (1000 birds)	143	224000	56000	151200	16800	3.2032	0.8008	Dist funds
7	Establishment of Commercial Layer units (10000 birds)	20	4000000	1000000	2600000	400000	8.0000	2.0000	NLM
	Grand Total						**19.2404**	**6.7356**	

ABSTRACT OF INTERVENTION

Sl No	Growth engine	Total Amount required Rs in lakhs per year	Funding Agency	Amount required Rs in Crs for subsidy	Quarter wise requirement			
					1st qtr	2nd qtr	3rd qtr	4th qtr
1	MILK PRODUCTION				*10%*	*40%*	*40%*	*10%*
			AH Department	18.4892	1.8489	7.3957	7.3957	1.8489
			MGNREGS	0.9663	0.0966	0.3865	0.3865	0.0966
			Additional funds (Dist Funds)	18.7818	1.8782	7.5127	7.5127	1.8782
			NLM	0	0.0000	0.0000	0.0000	0.0000
	TOTAL	**50.1554**		**38.2372**	**3.8237**	**15.2949**	**15.2949**	**3.8237**
2	MEAT PRODUCTION				*10%*	*50%*	*40%*	*0%*
			AH Department	3.7648	0.3765	1.8824	1.5059	0.0000
			MGNREGS	0.0000	0.0000	0.0000	0.0000	0.0000
			Additional funds (Dist Funds)	0.9708	0.0971	0.4854	0.3883	0.0000
			NLM	2.0000	0.2000	1.0000	0.8000	0.0000
	TOTAL	**19.2404**		**6.7356**	**0.6736**	**3.3678**	**2.6942**	**0.0000**

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Sl No	Mandal Name	Milk production							
		013 1		01 15		015 1 t at			
		T		T		T		I	
1		1 8 .0	.5	130 .	8.	1 1. 5	35.1	.01	0.
	. . a	8 18.01	1 .8	8 .	1 .	100 .	.11	.	0.
3	a	8 88. 0	1 . 8	531.0	0.	10 5.3	5.	.	0.
	a ala a	081 .	1. 3	0	8.5	83 .	5 1	11.05	0.
5	a ll	10 3.	1. 5	11 .	. 8	1 .3	30.	5.	0.
	a at a	15 .58	31.5	1 1 .	3 . 8	1881 . 5	5.1	8.3	0. 1
	a a	5 .1	13.51	1 .15	15.	805 .5	1 .3	3.5	0. 8
8	t a a a a	3.30	1 .3	10 8.8	. 1	115 . 1	.	5.15	0.5
	al ta	155 5.1	31.15	1 515.	3 .33	18585.	. 0	8.	0. 3
10	o l total	11531.5	3.0	1 8.1	. 0	13 0. 8	33.0	.1	0. 8
11	al total	113 .	. 5	1 008.8	.	13513. 5	3 . 3	.01	0. 3
1	a ta	1 .	5.	13 1.	30. 8	15 85. 5	3 .1	.8	0.
13	. . a	13 .58	.5	1 5.	3 .18	1 58. 5	3 .50	.3	0.
1	a a	10355. 3	0. 1	10 80.	.1	1 35 .5	.	5.50	0.5
15	T la	1080 . 1	1. 1	11 5 .	5. 1	1 8 5.3	30. 5	5.	1.10
1	. . a	8 8. 1	1 .	10 1.8	. 3	11 . 8	8.15	5.	0.5
1	att a	35.	18.	10.	1.80	1115 .	.	.	0.
18	ta a	105 . 8	1.13	11 05.8	. 5	1 0 .8	30.	5. 1	1.03
1	aa at a aa .	8815.53	1 . 3	3 . 8	0.5	1051 .	5. 5	. 8	0.
0	a	358.	18.	.01	1.83	111 .	.80	.	0.
1	all	0 .33	18.1	3. 3	1.	10851.	.0	.83	0.
	la	1 5 .8	8.51	15115.8	33. 5	1 00 .8	0.8	.5	0.
3	o a all	10 0 .0	1.80	115 0.5	5. 3	1300 .0	31.	5.	0. 0
	a t a a	1 .1	33.88	1 5.	3 .5	0 1 .5	8.5	.00	0. 3
5	. ota	1 3 1.	8.	15 3 .8	33.53	1 1 .38	1.1	. 3	1.
	a a	1 8 .	5.3	13 8.8	.5	15133. 5	3 .3	. 3	
	. ota	1 3 .8	.	1 3.	8.5	1 5 .51	35.0	.50	
38	ot a ala a	1135 .1	. 1	1 0 3.1	.	1355 .0	3 .53	.03	
	a	13 .5	.00	1 31 .8	31.	1 10 . 5	38. 5	.1	
30	a a a a	11 3.8	.	1 188	.81	13 15. 1	3 .	.10	
31	ll a la	1 55 .8	5.11	13315.3	.	1 83. 1	35.	.	
3	a at a	11 5 .0	3. 1	1 8.	.8	1 .8	3 .	.35	
33	a a	1318 .	.3	13 8 .	30.	15 3 . 3	3 .	.00	
3	o a a	833. 3	15.	830 .5	18.	3 .3	. 3	.1	
	a at a	1800.5	3. 0	1 0 .	. 0	1 8.50	5.1	0.	
	o l	8 . 5	8.58	5 .0	10.01	511 .05	1 .	. 8	
	al	3 .	.3	3 15.8	8. 1	0 .	10.58	1.	
	a a a a	3 0.31	8. 8	0 .	10.13	51 .155	1 . 3	.30	
	Vi ianagaram IST TOTAL	414113.91	828.23	439126	966.08	494148.9	1185.96	219.88	

Sl No	Mandal Name	Meat production						
		013 1		01 15		015 1 t at		
		T		T		T		I
1		15.5	.	3 .0	3.5	.	.01	0.
	. . a	30.33	.88	53.3	3.80	85.	.	0.
3	a	1	3. 3	301.51	.5	3 0.13	5.10	0.58
	a ala a	.18	.8	.8	3. 5	81.88	. 3	0. 8
5	a ll	5 .1	3.18	.58	.1	315.3	. 3	0.5
	a at a	1 5.	. 5	15.1	3. 3	. 3	3.	0. 1
	a a	5.1	.81	.	3.	.3	.1	0. 8
8	t a a a a	55. 5	3. 0	81.1	.	31 . 1	.	0.5
	al ta	3 5.	.3	380.1	5. 0	8.8	. 3	0. 3
10	o l total	3 3.	.05	35 .3	5.35	01. 8	.03	0. 8
11	al total	3 5.	.3	3 .	5. 0	8.	. 3	0. 3
1	a ta	35.5	.	5 .0	3.8	. 3	.38	0.50
13	. . a	3 .58	.0	35 .01	5.3	0 .	.0	0.
1	a a	.8	3.0	1.	.0	30 . 5	.5	0.5
15	T la	5 0.	.51	5 . 1	8.5	5.	.	1.10
1	. . a	.10	3.05	8. 8	.03	30 .88	.5	0.5
1	att a	55. 3	3.1	80. 5	. 1	31 .	. 5	0.5
18	ta a	31.	.8	5 . 0	3.8	8 .	.30	0.
1	aa at a aa .	88.	.11	53 .8	8.0	0 .	.10	1.03
0	a	11 1. 8	1 .0	1 33.85	18.51	13 1. 1	0.88	.3
1	all	1 .	1 . 5	1 .	1.	1 1 . 5	.1	. 5
	la	0 .	5.0	. 5	.	505.33	.58	0.8
3	o a all	5 .	5. 1	50 . 0	.5	5 . 5	8.50	0.
	a t a a	330.83	.1	3 3.88	5.	10.	.1	0. 0
5	. ota	8.	3. 3	3 8.	.	3 0.3	5.55	0. 3
	a a	0 . 8	5.5	8.	33. 3	53 .03	38.0	.3
	. ota	1.	11.	1035.30	15.53	11 . 3	1 .5	1.
38	ot a ala a	1 35.	1 .	15 8.	3. 8	1 80. 0	. 1	3.03
	a	510.5	.38	5 1.55	8.	33. 8	.50	1.08
30	a a a a	3 . 3	. 3	33. 1	.50	8 .1	.3	0.83
31	ll a la	. 1	.	8 .3	13.11	8 .3	1 .	1. 8
3	a at a	15 1.88	1 . 5	1 8. 1	5. 3	1 50.38	.	3.3
33	a a	3 .33	.	810.	1 .1	1 .8	13.	1.5
3	o a a	1 8.51	.11	185.3	. 8	0 .08	3.1	0.3
	a at a	5 .01	0. 5	5 . 1	0.8	. 5	0.	0.11
	o l	8 .	1.05	. 1	1.3	10 .5	1.5	0.18
	al	111.0	1.3	1 . 3	1.8	1 .5	.5	0.
	a a a a	.3	0. 5	83.	1.	. 0	1.	0.1
	Vi ianagaram IST TOTAL	18277.00	228.46	20103.20	301.55	22712.79	340.69	39.14

Sl No	Mandal Name	Egg production						
		013 1		01 15		015 1 t at		
		o. a		o. a		o. a		l
1		. 8	0.11	5.	0.1	5.8	0.18	0.03
	. . a	.	0.1	. 0	0.18	.3	0.	0.0
3	a	8.	0. 0	.1	0. 5	10.1	0.31	0.05
	a ala a	.	0.1	. 5	0.18	.38	0.	0.0
5	a ll	. 5	0.1	.	0. 1	8.50	0. 5	0.0
	a at a	.	0.10	.51	0.1	5.00	0.15	0.03
	a a	. 5	0.10	. 0	0.13	5. 1	0.1	0.03
8	t a a a a	. 8	0.1	.	0.18	.3	0.	0.0
	al ta	.	0.1	.	0.18	.38	0.	0.0
10	o l total	. 1	0. 1	.	0.	10.81	0.3	0.0
11	al total	.0	0. 0	.5	0.	10.	0.3	0.0
1	a ta	5.1	0.1	5.	0.15	.03	0.18	0.03
13	. . a	.85	0.15	. 5	0. 0	8.0	0.	0.0
1	a a	.	0.15	.11	0. 0	.88	0.	0.0
15	T la	8. 5	0.1	.15	0. 5	10.15	0.30	0.05
1	. . a	.	0.1	.	0.18	.3	0.	0.0
1	att a	5.	0.1	5.5	0.15	.1	0.1	0.03
18	ta a	.	0.1	.	0. 1	8.	0. 5	0.0
1	a a at a a a .	.	0.1	.3	0. 0	8.1	0.	0.0
0	a	.51	0.15	.8	0.1	.	0. 3	0.0
1	all	08 .5	. 5	0 . 1	0. 8	3.58	3.31	1 . 3
	la	.11	0.1	.	0.18	.1	0. 1	0.0
3	o a all	.	0.1	. 8	0. 1	8.5	0.	0.0
	a t a a	. 1	0.1	8.05	0.	8. 3	0.	0.05
5	. ota	13.	0.31	1 .51	0. 0	1 .0	0. 8	0.08
	a a	11.	0.	1 .	0.3	13.83	0. 1	0.0
	. ota	8.	0.1	.1	0. 5	10.11	0.30	0.05
38	ot a ala a	11.0	0. 5	11.	0.3	1 .	0.3	0.0
	a	8.3	0.1	8.	0.	. 5	0.	0.05
30	a a a a	1.	5.88	.	. 0	30 .3	.1	1.5
31	ll a la	. 5	0.1	8.0	0.	8.	0.	0.05
3	a at a	30.	0. 0	3 .	0. 0	3 .3	1.0	0.1
33	a a	5 .31	5.	.13	. 8	301.	.05	1.5
3	o a a	. 5	0.11	5.0	0.1	5.5	0.1	0.03
	a at a	1.8	0.0	1. 5	0.05	.1	0.0	0.01
	o l	1. 8	0.03	1.5	0.0	1.	0.05	0.01
	al	.35	0.10	. 0	0.13	5.10	0.15	0.03
	a a a a	. 3	0.05	.3	0.0	.	0.08	0.01
	Vi ianagaram IST TOTAL	2865.00	64.46	3030.12	83.33	3357.10	100.71	17.38

Constraints

- Acute shortage of staff – 30% shortage
- Inadequate Mobility facility and other logistics
- Natural calamities
- Shortage of Labourers due to NREGS
- Commercialisation and Mechanisation of agriculture

THANK YOU

Dr Y SIMHACHALAM

JOINT DIRECTOR

ANIMAL HUSBANDRY

VIZIANAGARAM

Swarnandhra Vision
A Mission on Primary Sector

Vizianagaram District Team




ICRISAT International Crops Research Institute for the Semi-Arid Tropics

Vizainagaram District Profile

Major Soils	area ('000 ha)	% of total
Red Sandy loam Soils	119.5	37
Red sandy clay soils	80.8	25
Red loamy Sandy Soils	71.1	22
Clay loam ,sandy and clay soils Soils	51.7	16
Total	323.1	100

Rainfall	Rainfall (mm)
SW monsoon (June-Sep)	692
NE monsoon (Oct-Dec)	246
Winter (Jan-Feb)	26
Summer (March-May)	167
Annual	1131

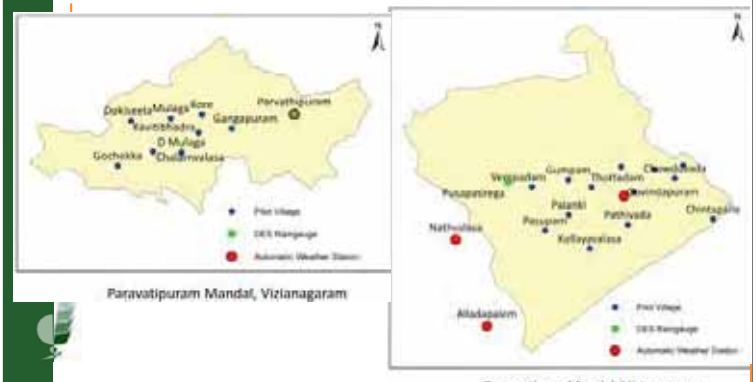
CROP WISE TENTATIVE AREAS UNDER IRRIGATION IN VIZIANAGARAM 2014

SL NO	CROP	Normal area ha	Area covered ha	% of Normal area	Total Irrigated Area, ha	% of Area of cropped area	un-Irrigated Area	Total area
1	High irrigated crops (Paddy & Sugarcane)	131813	124328	94	116899	93	9047	125946
2	Medium irrigated crop (Maize, Groundnut and Cotton)	39819	32012	80	9279	27	22733	32012
3	Rainfed crops (Sesamum, Green gram, Black gram, Pigeonpea, Ragi	36345	19022	52	0	0	20263	20263
	Total	207977	175362	84	126178	72	42996	178221

Average crop yield kg ha-1, 2014
District: Vizianagaram

S NO	NAME OF THE CROP	Average yield in Kg/acre
1	SESSAMUM	329
2	BAJRA	493
3	KORRA	592
4	PADDY	1725
5	G NUT	647
6	MESTA	1833
7	RAGI	727
8	MAIZE	2023
9	COTTON	369
10	SUGARCANE	32033

Pilot site Maps of Parvathipuram & Puspatirega Mandal villages and weather recording locations, Vizainagaram District.



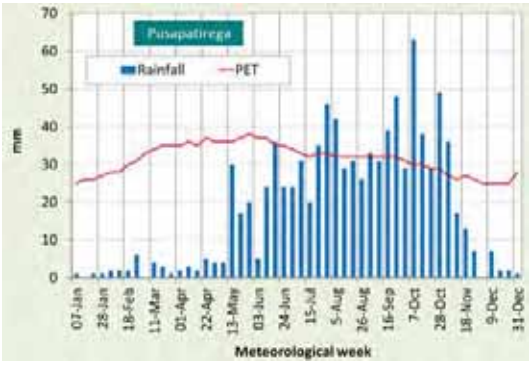
Paravatipuram Mandal, Vizianagaram

Pusapatirega Mandal, Vizianagaram

Pilot site Information of Parvathipuram & Puspatirega Mandal villages basic information, Vizainagaram District.

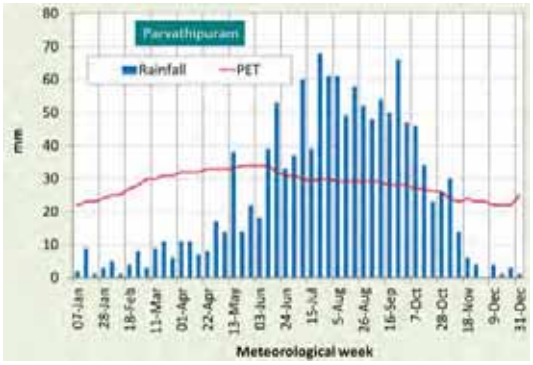
Sl.No	Name of the Village	No of house holds	Geographical area	Net area sown	Current fallows	Live stock population	Fisheries Area	Water shed	Tanks
	Parvathipuram Mandal (i)								
1	Kore	130	443	204	90	354			11
2	Gangavaran	153	353	252	26	944			7
3	Kavitibhadra	111	241	205	5	256			13
4	D Mulaga	135	91	68	7	871			2
5	Mulaga	482	1957	800	179	780			20
6	Challamnaiduvalasa	99	181	130	19	279			8
7	Dokiseela	356	1415	319	229	2057		12	15
8	Gochekka	226	439	296	102	836			7
	Pusapatirega mandal(ii)	1692	5120	2866	657	6377	180		83
1	Pusapatirega	1387	765	313	379	3021			22
2	Pasupam	345	227	77	120	724			7
3	Pallanki	78	165	84	67	861			3
4	Vempadam	824	623	370	200	3997			13
5	Gumpam	352	328	132	174	1578			12
6	Kollayavalasa	369	395	112	209	1354			3
7	Tottadam	227	202	78	93	733			7
8	Govindapuram	406	417	292	90	3060			7
9	Chouduvada	72	414	96	226	2850			17
10	Barinikam	137	269	93	148	461			5
11	Pathivada	1002	543	223	223	1463			10
12	Roluchappidi	153	81	76	0	514			2
13	Krishnapuram	149	114	87	22	721			2
14	Konayyapalem	143	196	77	100	641			3
15	Chintapalli	1417	415	84	264	4200			4
	Total	7061	5153	2192	2316	26178	240		117
	Total	8753	10273	5057	2972	32555	420		238

Vizianagaram district, Pusapatirega mandal



Element	Kharif	Rabi	Annual
PET (mm)	677	627	1632
Rainfall (mm)	727	110	927

Vizianagaram district, Parvathipuram mandal



Element	Kharif	Rabi	Annual
PET (mm)	611	559	1468
Rainfall (mm)	1004	136	1289

Vizianagaram district Soil sampling activity in pilot site.

S.No.	Village Name	Geogra phical Area, Ha	No. of House holds	Cultivable land, Ha	No of samples	Marginal < 1 ha	Small 1-2 ha	Medium& Big >2 ha
Selected villages of Parvathipuram Mandal								
1	Kore	443	130	294	25	15	6	5
2	Gangapuram	353	153	277	30	20	7	3
3	Kavitibhadra	241	111	210	25	19	5	1
4	Mulaga	1957	482	979	60	30	17	13
5	Dokiseela	1415	356	548	50	25	17	8
6	Gochekka	439	226	398	25	16	4	5
7	Chalam valasa	181	99	149	20	13	4	3
8	Doggavani mulaga	91	135	76	15	10	4	1
	Total	5120	1692	3665	250	147	64	39
Selected villages of Pusapatirega Mandal								
1	Pusapatirega	765	1387	691	36.0	24	8	5
2	Pasupam	227	345	197	10.0	8	1	1
3	Palanki	165	78	151	10.0	6	1	3
4	Vempadam	623	824	570	30.0	20	6	3
5	Gumpam	328	352	305	16.0	13	2	1
6	Kollayavalasa	395	369	321	20.0	14	4	2
7	Thottadam	202	227	170	12.0	10	1	0
8	Govindapuram	417	406	382	20.0	17	2	1
9	Chouduvada	414	72	322	20.0	16	3	2
10	Bharinikam	269	137	241	12.0	9	1	1
11	Pathivada	543	1002	447	22.0	16	4	2
12	Roluchappidi	81	153	76	6.0	6	0	0
13	Krishnapuram	114	149	109	8.0	7	1	1
14	Konayyapalem	196	143	177	10.0	8	1	1
15	Chintapalli	415	1417	348	18.0	13	3	2
	Total (Acres)	5153	7061	4508	250	189	39	22
	Samples from, low land, midland and uplands are covered							

Vizianagaram district Agriculture crops, Area Production and GVA

Table: Agriculture crops productivity and Gross Value addition for pilot site area, during rainy and post rainy season, Vizinagaram district

	Agriculture crops productivity and GVA, for the year 2014-15			Expected improvement in 2015-16			% increase
	Area ha	Production Quintals	GVA Rs.Crores	Area ha	Production Quintals	GVA Rs.Crores	GVA
Kharif season							
Paddy	1352	48665	6.81	1352	54072	7.57	11
Maize	1073	40789	5.3	1268	54524	7.09	44
Sesamum	705	3525	1.62	736	4415	2.03	25
Groundnut	582	7270	2.91	532	7980	3.19	10
	3712	**100249**	**16.6**	**3888**	**120991**	**19.9**	**23**
Rabi Season							
Paddy	312	9990	1.4	312	11239	1.57	13
Maize	811	36495	4.74	887	44350	5.77	24
Black gram	199	996	0.43	208	1247	0.54	24
G.Gram	79	317	0.15	79	396	0.18	25
Sesamum	57	284	0.13	74	444	0.2	50
	1458	**48082**	**6.9**	**1560**	**57676**	**8.3**	**27**
Kharif + Rabi	**5170**	**148331**	**23**	**5448**	**178667**	**28**	**25**

Vizianagaram district, Puspatirega & Parvathipuram Mandal Milk, Meat and Egg production and GVA in Crores.

Table: Total milk,meat and egg production and GVA over 2014-15

Animal Husbandry Dept	Populations of Animals & birds	MILK & Meat MTs	GV in crores	MILK/ Meat MTs	GVA in crores	MILK/Meat MTs	GV in crores	GVA in Crores over 2014-15	% Increase GVA
		2013-14		2014-15		2015-16			
Milk	9006.00	6999	13.90	7531.28	16.54	9294.88	22.31	5.77	35
Meat	148235.00	1117.80	11.24	1229.82	14.76	1389.87	20.85	6.09	41
Eggs	23894.00	5.33	0.11	5.71	0.14	6.37	0.19	0.05	36
Total	181135	8122	25.3	8767	31.4	10691	43.4	11.91	38

Vizianagaram district Horticulture crops, Area Production and GVA

AREA, PRODUCTION & INCOME of Horticulture crop in Pilot Site Villages 2013-14, 2014-15 & 20015-16, VIZIANAGARAM DISTRICT

S. No	Horticulture crops	Year 2013-14 Total Ha	Production in MT's	Gross Value (Crore)	Year 2014-15 Total Ha	Production in MT's	Gross Value (Crore)	Year 2015-16 Total Ha	Production in MT's	Gross Value (Crore)	GVA over 2014-15 Crore	% increase over GVA
1	Mango	331	2317	1.74	400.4	3603.6	2.88	450.4	3603.6	3.06	0.18	**5.9**
2	Banana	124	1984	0.89	154.8	3096	1.55	154.8	3096	1.70	0.15	**8.8**
3	Cashew	435	217.5	0.85	510	306	1.22	550	330	1.49	0.26	**17.4**
4	Oil Palm	44	792	0.51	52.4	943.2	0.66	52.4	943.2	0.71	0.05	**7.0**
5	Coconut	412	49.44lakh Nuts	1.98	460	61.2lakh Nuts	3.45	510	92.7lakh nuts	5.74	2.29	**39.9**
6	Vegetables	6.5	85.5	0.10	6	99	0.12	10	170	0.22	0.11	**50.0**
	Total	**1352.5**		**6.07**	**1583.6**		**9.88**	**1727.6**		**12.92**	**3.04**	**23.5**

Vizianagaram district, Puspatirega & Parvathipuram Mandal pilot site, Fisheries, Activities

FISHING GROWTH ENGINES - TARGETED PRODUCTION AND GVA FOR 2015-16

Fisheries Activity	2014-15			2015-16			Increased Value GVA in Crore	% Increase in GVA
Activity	Extent (Ha)	Production (Tone)	Value (Crore)	Extent (Ha)	Qty. Expected (Tone/No)	Value (Crore)	Expected production over 2014-15	
Inland Fish	421	47.95	0.362	421	241	2.56	2.20	6.18
Brakish water Shrimp	0	0	0	24	165	4.95	4.95	100
Marine Fish	Sea	5900	59.00	Sea	19000	119.0	60	60
Total Fisheries	421	5950	59.37	445	19406	126.5	67.2	67.2

Vizianagaram district, Puspatirega & Parvathipuram Mandal Growth Engines of Pilot site

Sl No	Growth Engines	2014-15 Area	Production (Tonnes)	GVA (Rs.Crore)	Target 2015-16 Area	Production (Tonnes)	GVA (Rs Crores)	GVA over 2014-15 (Crore)	% increase overGVA
1	Paddy	1384	58655	8.21	1664	65311	9.14	0.93	11.3
2	Maize	1884	77284	10.04	2155	98874	12.86	2.82	28.1
3	Sesamum	762	3809	1.75	810	4859	2.23	0.48	27.4
4	Groundnut	582	7220	2.91	532	7980	3.39	0.48	16.5
5	Blackgram	199	996	0.43	208	1247	0.54	0.11	25.6
6	Greengram	79	317	0.15	79	396	0.18	0.03	20
	Agriculture	4890	148281	23.5	5448	178667	28.3	4.85	20.6
6	Mango	400.4	3603.6	2.88	450.4	3603.6	3.06	0.18	5.9
7	Banana	154.8	3096	1.55	154.8	3096	1.7	0.15	8.8
8	Cashew	510	306	1.22	550	330	1.49	0.27	17.4
9	Oil Palm	52.4	943.2	0.66	52.4	943.2	0.71	0.05	7
10	Coconut	460	61.2 lakh	3.45	510	92.7lakh	5.74	2.29	39.9
11	Vegetables	6	99	0.12	10	170	0.22	0.1	50
	Horticulture	1583.6		9.88	1727.6		12.92	3.04	23.5
	Milk	9006	7531	16.5	9006	9295	22.3	5.8	35
	Meat	148235	1230	14.8	148235	1390	20.9	6.09	41
12	Egg (Lakh No)	23894	5.7	0.14	23894	6.4	0.19	0.05	36
14	Livestock	181135	8767	31.4	181135	10691	43.4	11.91	38
	Inland Fish	421	47.95	0.362	421		2.56	2.198	6.18
	Brakish water Shrimp	0	0	0	24	43.4	4.95	4.95	100
15	Marine Fish	Sea	5900	59.05	Sea	19000	119	60	100
16	Fisheries	421	5950	59.4	445	19043.4	127.5	67.2	67.2
	All sector			122.8			213.2	86.2	

Vizianagaram district, Puspatirega & Parvathipuram Mandal
DWMA Activities for watershed devlopment

S. No.	DWMA Proposed activities for pilot site 15 villages	Estimates for Pusapatirega Mandal selected villages		Estimates for Parvathipuram Mandal selected villages	
		No. of Works	Total(Rs.in Lakhs)	No. of Works	Total(Rs.in Lakhs)
1	LAND DEVELOPMENT PROJECTS WITH MGREGS, LDFSAP-SC &ST,	969	331.05	2752	1504.4
2	Land development projects LDFSAP-SM. LDCSAP-SM	1059	314.45	3099	852.1
3	Drainage Line Treatment Project	73	299.52	15	71.4
4	Afforestation Project	2356	806.37	3715	1269.3
5	Fodder Development and Fodder Conservation Project	3	0.59	3	0.9
6	CPR-Land Development Project	94	404.21	9	18.4
7	Irrigation Drains and Irrigation Channels Project	2321	1290.90	937	716.3
8	LD-FAP	6	7.20	936	6229.4
9	Minor Irrigation Restoration Project	331	4897.74	74	15.1
10	Compost Manure Project	127	26.82	1832	2974.5
11	Horticulture and Plantation Project	357	340.58	3	20.4
12	Open Well Project In Ground Water Potential Areas For SC_ST & SF_MF	2	3.81	0	0.0
13	SMC TRENCHES PROJECT IN EXISTING HORTICULTURE GARDEN OF SC_ST,SF_MF IN RAINFED AREAS	7	27.66	0	0.0
14	Public Institutions Development Project	55	167.10	115	129.3
15	Drinking Water Tanks Project	295	1542.40	159	584.1
16	Flood Control Project	10	43.70	40	8.2
17	Rural Connectivity Project	427	1872.68	703	2924.4
18	Land Development Project In Community Lands	103	334.30	0	0.0
19	Land Development in Flood Affected Villages	477	11.76	65	206.0
20	Fisheries Development Project	1	4.21	6	27.2
21	Rural Sanitaion Project	144	19.71	219	49.5
	Total	9217	12747	14682	17601

Vizianagaram district, Puspatirega & Parvathipuram Mandal
Major crops in the pilot villages

- **Major cropped area: Paddy and Maize cultivation during kharif and during Rabi Maize, Black gram and Green gram, Sesamum**
- **Horticulture area:** 36% area is under Horticulture-cashew, mango, oil palm, coconut and banana
- **Major crops** - Kharif : Paddy, Maize, Sesamum Groundnut
  Rabi: Maize, Sesamum, Green gram and Black gram
- **Horticultural crops:** Cashew, Mango, Coconut, Banana, Oil Palm
- **Animal husbandry:** Buffaloes, Cows, Bullocks, Sheep, Goat, Backyard Poultry
- **Fisheries:** Inland Fish, Prawn cultivation and marine fish

Vizianagaram district, Puspatirega & Parvathipuram Mandal
Major systems in the pilot villages

- Poor Nutrient Status of soil low use micro nutrients, excess use of Urea.
- Non timely control weeds and pest
- Frequent flooding and severe damages to crops
- Low productivity of Paddy grown with coarse grain old variety (MTU 1001) and severe infestation of BPH, Stem Borer (pests) and Blast (disease).
- Yellow mosaic disease infestation in Green gram and Black gram crops during rabi.
- Low productivity of horticulture plantations
- Lack of access to the markets
- Poor mechanization
- Local buffalo breeds giving low milk yield (2-3 lit/day)
- Subsistence vegetable cultivation
- Insufficient processing industries

Enhancing Rice Productivity through Improved Cultivars and Mechanisation

- Improved varieties like NLR 34449, MTU 1121 suitable
- Varieties for submergence and Salinity tolerant cultivars
- Balanced nutrients application
- Micronutrient application-zinc sulphate and Agribor
- Drought tolerant cultivars (IR64 drt1)
- Seed Treatment
- Green manuring incorporation
- Bio-fertilzer usage PSB an Azospirilium
- Neem oil spray along with urea.
- Pigeon pea planting on bunds of paddy (ICPH2740)
- Mechanisation for transplanting
- Direct seeded rice in upland as well as tail end areas using machines
- Alternate drying and wetting technology
- Pest and disease control
- Pre emergence and post emergence weedicide application

Sustainable Intensification of Crops

Rice Fallow Areas

- Minimum tillage after direct seeded or early maturing paddy would enable cultivation of rabi crops and save water also.
- Balanced nutrients application with drought and disease tolerant cultivars would increase productivity during rabi.
- Crop diversification with maize and high value crops.
- Sowing with zero till planter without any moisture loss

Rainy Season Maize

- Using drought tolerant maize in upland areas productivity can be enhanced
- Balanced nutrients application would increase productivity
- Proper land configuration R& F and BBF to avoid water logging

Sesamum

- Rice fallow area low moisture short duration high yielding varieties
- Line sowing and proper weed management.
- Balanced nutrient and Micronutrients application

Sustainable Intensification of Crops

Groundnut

- Seed treatment with fungicide, *Rhizobium*, PSB and use of *Trichoderma* would enhance crop productivity
- Balanced nutrient application along with drought (ICGV 91114, K6,K9, Dhararani, Anantha) tolerant cultivars would increase the productivity
- IPM can reduce the cost of cultivation and increase profitability
- Sowing with seed drill, application of micronutrients, gypsum zinc and boron

Green gram and Black gram

- Black gram varieties resistant to Yellow mosaic virus disease - PU-31; and LBG-787
- Green gram varieties tolerant to Yellow mosaics virus disease- LBG-460; TM-96-2
- Balanced nutrient application
- Timely control of vectors and other pests

Interventions in Horticulture Plantations

Cashew and Mango

- Planting grafted saplings of high yielding varieties
- Rejuvenation
- Top working
- Integrated nutrients management
- Micro irrigation with fertigation
- Pest and disease control

Coconut, Banana and Pineapple

- Planting high yielding varieties of Coconut and Pineapple
- Tissue culture plants for Banana
- Integrated nutrients management
- Micro irrigation with fertigation
- Pest and disease control

Livestock

Sl.No.	Interventions
	Milk
1	Increase the number of better yielding cattle
2	Supply of good quality feed with better digestibility
3	Better feeding practices
4	Fodder bank PPP mode for off season requirement
5	Milk collection center-proper pricing and timely payment
	Meat
1	Providing more Ramlamb units
2	Sheep and Goat de worming
4	Rejuvenation of grazing lands,
	Egg
1	Encouraging back yard poultry
2	providing subsidy on power to poultry farms

Fisheries

S. No.	Interventions
	Inland fishing
1	Stocking of advanced fingerlings of fish seed in all tanks, reservoir, promotion of captive nurseries, desliting and deepening of tanks under RKVY, NFDB & MGRNEGS.
2	Cage culture in reservoirs
3	Promotion of L.vannamei culture
	Brakish water fish
1	Revival of Abandoned BW Ponds /Sea bass Culture
2	BW shrimp Ponds for shrimp production
	Marine fishing
1	Marine Fishing –Boats (360 boats) ,Marine Cage Culture
2	Marine Capture Fishery -Deep sea Fishing, FADs, Motorization, Value Addition enhance fish production
2	Monitoring and technical guidance from department officials and MPEDA
3	Innovative technology for fish production , Marine fish culture, Sea Weed Culture, Seed, Pendals, Anchors and maintenance
4	Supply of disease free good quality Brood material on subsidy to small and marginal farmers

Thank you

ICRISAT is a member of the CGIAR Consortium

International Crops Research Institute for the Semi-Arid Tropics

WORKSHOP ON

PRIMARY SECTOR MISSION

at

ICRISAT, Hyderabad

28th & 29th April 2015

Joint Director of Agriculture

West Godavari District

West Godavari is having distinction of being **"Rice Granary of Andhra Pradesh"** on par with East Godavari & Krishna Districts.

- Total geographical area(Ha) : 774252
- Targetted Agri. cultivable area(Ha) : 589286
- Production target('000 MTs) : 4511343
- Targeted monitory value(Rs.Crs) : 6498.51
- Growth Target (%) : 11.4%
- Even though 13 crops are grown we are focussed on 4 major crops duly prioritizing the gaps which are affecting the productivity there by production

PROJECTIONS OF ENHANCEMENT OF PRODUCTION & VALUE OF AGRICULTURAL PRODUCE FOR THE YEAR 2015-16 INCOMPARISON WITH 2014-15.

S NO	CROP	AREA (Ha)		PRODUCTION ('000 MTs)		VALUE (CRORE Rs)	
		2014-15	2015-16	2014-15	2015-16	2014-15	2015-16
1	PADDY	408545	411128	1569.81	1804.85	3610.56	4150
2	MAIZE	57355	64520	450.05	506.3	589.58	663.25
3	G.NUT	2450	4267	5.59	9.53	22.33	38.1
4	PULSES	22491	51156	8.3	30.69	33.20	122.76
5	OTHER CROPS	471506	58185	1863.92	2176.39	1588.3	1583.92
TOTAL		**553802**	**589256**	**3894.47**	**4511.34**	**5833.34**	**6498.51**

GROWTH RATE AIMED : 11.4 %

MANDAL WISE

PROJECTIONS OF ENHANCEMENT OF PRODUCTION & VALUE OF AGRICULTURAL PRODUCE FOR THE YEAR 2015-16 INCOMPARISON WITH 2014-15.

SNO	MANDAL	2014-15			PRODUCTION IN M.TONNES	Monitory value (Rs. Crores)	2015-16			PRODUC-TION IN MTs	Monitory value (Rs. Crores)
		KHARIF 2014	RABI 14-15	TOTAL Area in Ha.			KHARIF 2015	RABI 15-16	TOTAL Area in Ha.		
1	ELURU	4231	393	4624	15863	36	4427	375	4802	19574	45
2	PEDAPADU	8325	378	8703	29453	68	8712	361	9073	36658	84
3	PEDAVEGI	3249	530	3779	13196	30	3400	506	3906	16110	37
4	DENDULURU	7476	3750	11226	41620	96	7823	3577	11400	48993	113
5	BHIMADOLE	6372	6256	12628	49084	113	6668	5968	12636	56186	129
6	NALLAJERLA	3156	1629	4785	17774	41	3303	1554	4857	20902	48
7	D.TIRUMALA	2489	616	3105	11043	25	2605	588	3193	13334	31
8	UNGUTURU	11005	9049	20054	76963	177	11516	8632	20148	88758	204
9	T.P.GUDEM	11217	9815	21032	81077	186	11738	9362	21100	93254	214
10	PENTAPADU	9610	9587	19197	74702	172	10056	9145	19201	85449	197
11	GANAPAVARAM	7287	7287	14574	56722	130	7625	6951	14576	64875	149
12	NIDAMARRU	4998	6341	11339	44878	103	5230	6049	11279	50830	117
13	CHINTALAPUDI	6001	801	6802	23582	54	6280	764	7044	28915	67
14	LINGAPALEM	2375	520	2895	10236	24	2485	496	2981	12398	29
15	K.KOTA	2472	139	2611	8865	20	2587	133	2720	11013	25
16	T.NARASAPURAM	2562	68	2630	8849	20	2681	65	2746	11053	25

SNO	MANDAL	2014-15			PRODUCTION IN M.TONNES	Monitory value (Rs. In Crores)	2015-16			PRODUC-TION IN MTs	Monitory value (Rs. In Crores)
		KHARIF 2014	RABI 14-15	TOTAL Area in Ha.			KHARIF 2015	RABI 15-16	TOTAL Area in Ha.		
17	KOVVURU	3630	2325	5955	22452	52	3799	2218	6017	26168	60
18	DEVARAPALLI	3086	1348	4434	16291	37	3229	1286	4515	19281	44
19	CHAGALLU	2720	2294	5014	19278	44	2846	2188	5034	22206	51
20	TALLAPUDI	2948	1474	4422	16391	38	3085	1406	4491	19297	44
21	GOPALAPURAM	2686	463	3149	11019	25	2811	442	3253	13436	31
22	KOYYALAGUDEM	2440	43	2483	8331	19	2553	41	2594	10423	24
23	J.R.GUDEM	3977	2022	5999	22261	51	4162	1929	6091	26193	60
24	JEELUGUMILLI	921	0	921	3072	7	964	0	964	3859	9
25	BUTTAYAGUDEM	1539	0	1539	5134	12	1610	0	1610	6445	15
26	POLAVARAM	2053	152	2205	7525	17	2148	145	2293	9315	21
27	KUKUNOORU	1494	25	1519	5095	12	1563	24	1587	6376	15
28	VELAIRPADU	1298	17	1315	4406	10	1358	16	1374	5515	13
29	TANUKU	5271	5274	10545	41043	94	5516	5031	10547	46944	108
30	UNDRAJAVARAM	5029	5009	10038	39057	90	5263	4778	10041	44681	103
31	PERAVALI	3377	3434	6811	26540	61	3534	3276	6810	30337	70
32	NIDADAVOLE	6644		13145	51080	117					134

S.NO	MANDAL	2014-15			PRODUCTION IN M.TONNES	Monitory value (Rs. In Crores)	2015-16			PRODUC-TION IN MTs	Monitory value (Rs. In Crores)
		KHARIF 2014	RABI 14-15	TOTAL Area in Ha.			KHARIF 2015	RABI 15-16	TOTAL Area in Ha.		
33	PENUGONDA	5086	5086	10172	39590	91	5322	4851	10173	45278	104
34	PENUMANTRA	5829	5921	11750	45783	105	6100	5648	11748	52330	120
35	IRAGAVARAM	5985	6014	11999	46716	107	6263	5737	12000	53423	123
36	ATTILI	6592	6625	13217	51459	118	6898	6320	13218	58846	135
37	NARASAPURAM	6518	6518	13036	50736	117	6821	6217	13038	58028	133
38	MOGALTHURU	1830	1932	3762	14699	34	1915	1843	3758	16774	39
39	ELAMANCHILI	3517	3346	6863	26616	61	3680	3192	6872	30506	70
40	PALACOLE	5237	5184	10421	40529	93	5480	4945	10425	46374	107
41	PODURU	6591	6591	13182	51305	118	6897	6287	13184	58679	135
42	ACHANTA	4560	4541	9101	35410	81	4772	4332	9104	40511	93
43	BHIMAVARAM	6201	6346	12547	48914	113	6489	6053	12542	55889	129
44	PALACODERU	6330	6330	12660	49273	113	6624	6038	12662	56356	130
45	VEERAVASARAM	6663	6663	13326	51865	119	6972	6356	13328	59320	136
46	AKIVEEDU	4717	4697	9414	36628	84	4936	4480	9416	41899	96
47	KALLA	5362	5217	10579	41093	95	5611	4976	10587	47051	108
48	UNDI	8519	8519	17038	66312	153	8915	8123	17038	75831	174
DISTRICT TOTAL		**231475**	**177070**	**408545**	**1559808**	**3588**	**242223**	**168905**	**411128**	**1804347**	**4150**

PADDY

GAP	INTERVENTIONS	SCHEME
Deficit Organic matter in the Soil	Usage of green manure crops like Pillipesera, Daincha, sunhemp	Distribution of seed under subsidy
Usage of old varieties	Introduction of new varieties like MTU-1061, MTU-1075, MTU-1064, NLR 34449	Seed village programme
Imbalanced use of Chemical fertilizers	Soil test based fertilizer usage	Intensive soil testing programme
Imbalanced use of micro nutrients	Zinc, Boron, Gypsum	Micronutrient deficiency correction scheme

Non maintenance of optimum plant population and following traditional way of transplanting methods	i) Broadcasting ii) Drum Seeding iii) SMSRI	Awareness creation through extension programmes like Polam Pilustundi and Chandranna Rythu Kshetram
Indiscriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds and with special reference to Rodents	Anti rodent campaign
Lack of Farm Mechanization	Mechanization through Rotovators, Transplanters, Harvesters and Driers	FM scheme
Under usage of cultivable land	Area expansion	Repair to the minor & medium tanks and irrigation canals
Loss of produce at the time of harvest due to cyclone		Release of canal water by Last week of May

MAIZE

GAP	INTERVENTIONS	SCHEME
Deficit Organic matter in the Soil	Green manure crops like Pillipesera, Daincha, sunnhemp	Distribution of seed under subsidy
Imbalanced use of Chemical fertilisers	Soil test based fertilizer usage	Intensive soil testing programme
Imbalanced use of micro nutrients	Zinc, Boron ,Gypsum	Micronutrient deficiency correction scheme
Lack of awareness on corn var. for other purposes	popularizing the other corn varieties like baby corn , sweet corn and pop corn.	Capacity Enhancement through ATMA & FTC

Lack of awareness on Zero Tillage practice	Adopting Zero tillage in rice fallows	Capacity Enhancement through ATMA & FTC
Indescriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds	Awareness creation through extension programmes like Polam Pilustundi and Chandranna Rythu Kshetram
Lack of Farm Mechanization	Encourage Farm Mechanisation	FM Scheme

GROUND NUT

GAP	INTERVENTIONS	SCHEME
Usage of old varieties	Introduction of new varieties like K-9, Dharani, Anantha	Encouragement through distribution of seed under subsidy
Lack of awareness on Gypsum usage	Application of Gypsum	Micronutrient deficiency correction scheme
Imbalanced use of micro nutrients	Zinc, Boron	
Improper water management	Effective water management through Sprinklers and water carrying pipes	NMOOP
Indescriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds	Capacity Enhancement through ATMA & FTC
Lack of Farm Mechanization	Encourage Farm Mechanisation	FM Scheme

PULSES

GAP	INTERVENTIONS	SCHEME
Usage of old varieties	Usage of new varities like PU 31, LBG 752, LGG 460	Encouragement through distribution of seed under subsidy
Imbalanced use of micro nutrients	Zinc,Gypsum	NFSM
Improper water management	Effective water management through Sprinklers, water carrying pipes & PP Equipment	NFSM
Indescriminate use of Pesticides	IPM Practices for control of Pests, Diseases, Weeds	Capacity Enhancement through ATMA & FTC
Lack of Farm Mechanization	Encourage Farm Mechanisation	NFSM
Under usage of cultivable land	Area expansion	Release of canal water for Kharif Paddy by last week of May.

Budget requirement for 2015-16

S.NO	Scheme	Units	Component	Total quantity required	Budgetary requirement (in Crore Rs)	Already available (in Crore)	Further requirement (in Crore)
1	Green Manure Seed	qtls	Pillipesera, Diancha, (qtls) Sunhemp	14000	2.80	0.00	2.80
2	FM (NSP,RKVY,SMAM)	No.		32986	126.00	0.00	126.00
3	Micronutrient correction scheme	MTs.	Zinc (Mts)	2000	2.00	1.64	0.36
			Boron	50	0.00	0.00	0.00
			Gypsum	3000	0.00	0.00	0.00
4	Seed Village Programme	units	SEED	225	0.40	0.05	0.35
5	NFSM	ha.	Inputs		29.25	3.23	26.02
6	Subsidy Seed	qtls	Seed	6890	2.10	0.00	2.10
7	NMOOP	ha.	Inputs		1.64	0.00	1.64
8	Chandra Rythu kshetram	Plots	Inputs		0.69	0.00	0.69
			Total		**164.88**	**4.91**	**159.97**

THANK YOU

PROJECTIONS OF ENHANCEMENT OF AREA, PRODUCTIVITY, PRODUCTION & MONITORY VALUE OF AGRICULTURAL PRODUCE FOR THE YEAR 2015-16 IN WEST GODAVARI DISTRICT

S.NO	CROP	AREA IN HA		PRODUCTION ('000 MTS)		VALUE IN CRORES	
		2014-15	2015-16(T)	2014-15	2015-16(T)	2014-15	2015-16(T)
1	**Rice**	408545	411128	1559.81	1804.35	3587.56	4150.00
2	**Jowar**	154	106	0.319	0.218	0.50	0.34
3	**Maize**	57355	64520	450.06	506.30	589.58	663.25
4	**Redgram**	915	412	0.68	0.268	2.94	1.16
5	**G'gram**	11563	27019	6.58	15.65	30.25	71.97
6	**B'Gram**	10013	23725	7.32	16.71	31.84	72.70

S.NO	CROP	AREA IN HA		PRODUCTION ('000 MTS)		VALUE IN CRORES	
7	**G'nut**	2450	4267	5581	9525	22.33	38.10
8	**Sesamum**	787	721	376	353	1.73	1.62
9	**Sunflower**	386	608	477	751	1.79	2.82
10	**Tobacco**	30003	28547	63006	59949	882.09	839.28
11	**Turmeric**	197	219	1241	1456	8.07	9.47
12	**Chillies**	2549	1770	3936	2733	18.89	13.12
13	**Cotton**	9795	5647	57906	33384	234.52	135.20
14	**S'cane**	19090	20597	1737190	2059700	421.27	499.48
			589286		4511343	**5833.34**	**6498.51**

PADDY

	AREA (Ha)	PRODUCTIVITY (Kgs/ha)
2014-15		
KHARIF	231475	3336
RABI	177070	4448
TOTAL	408545	
2015-16		
KHARIF	242223	4003
RABI	168905	4942
TOTAL	411128	
GROWTH TARGET	2583	

PADDY

	Production ('000 MTs)	Monitory value (Rs Crores)
2014-15		
KHARIF	782.20	1799.06
RABI	787.61	1811.50
TOTAL	1569.81	3610.56
2015-16		
KHARIF	969.62	2230.12
RABI	834.73	1919.88
TOTAL	1804.35	4150.00
GROWTH TARGET	244.54	539.44

MAIZE

	AREA (Ha)	PRODUCTIVITY (Kgs/ha)
2014-15		
KHARIF	2637	7782
RABI	54718	7850
TOTAL	57355	
2015-16		
KHARIF	2667	7782
RABI	61853	7850
TOTAL	64520	
GROWTH TARGET	7165	

MAIZE

	Production ('000 MTs)	Monitory value (Rs Crores)
2014-15		
KHARIF	20.52	26.89
RABI	429.53	562.69
TOTAL	450.05	589.58
2015-16		
KHARIF	207.55	27.19
RABI	485.55	636.06
TOTAL	506.30	663.25
GROWTH TARGET	56.24	73.67

GROUND NUT

	AREA (Ha)	PRODUCTIVITY (Kgs/ha)
2014-15		
KHARIF	343	1855
RABI	2107	2347
TOTAL	2450	
2015-16		
KHARIF	995	1855
RABI	3272	2347
TOTAL	4267	
GROWTH TARGET	1817	

GROUND NUT

	Production ('000 MTs)	Monitory value (Rs Crores)
2014-15		
KHARIF	0.64	2.54
RABI	4.95	19.79
TOTAL	5.59	22.33
2015-16		
KHARIF	1.85	7.38
RABI	7.68	30.72
TOTAL	9.53	38.10
GROWTH TARGET	3.94	15.77

PULSES

	AREA (Ha)	PRODUCTIVITY (Kgs/ha)
2014-15		
KHARIF	3739	582
RABI	14752	731
SUMMER	4000	363
TOTAL	22491	
2015-16		
KHARIF	2335	582
RABI	13821	1132
SUMMER	35000	589
TOTAL	51156	
GROWTH TARGET	28665	

PULSES

	Production ('000 MTs)	Monitory value (Rs Crores)
2014-15		
KHARIF	0.89	3.95
RABI	3.50	15.50
SUMMER	0.71	3.12
TOTAL	5.10	22.57
2015-16		
KHARIF	0.53	2.36
RABI	3.56	15.79
SUMMER	10.17	45.09
TOTAL	14.27	63.24
GROWTH TARGET	9.17	40.67

GOVERNMENT OF ANDHRA PRADESH

DEPARTMENT OF FISHERIES
WEST GODAVARI DISTRICT

ACTION PLAN FOR INCREASING OF AQUA PRODUCTION

2015 – 2016

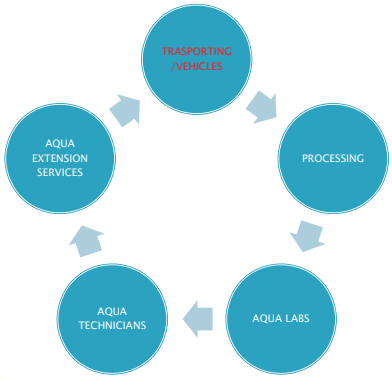
TRUST AREAS

- DEWEEDING OF WATER SOURCES
- DE SILTATON OF WATER BODIES
- REMOVAL OF CARNIVOROUS FISHES
- REMOVAL OF PREDATORY FISHES
- MESH REGULATION
- BAN OF HYLA DRAG NETS
- PROTECTION OF ENDANGERED SPECIES

STAKE HOLDERS DIRECT EMPLOYMENT

- AQUA FARMERS
- FISHERMEN
- GOVERNMENT/LEGISLATION
- MARKETTING

STAKE HOLDERS INDIRECT EMPLOYMENT



ROLE OF GOVERNMENT/ LEGISLATION/ GOVERNENCE

- DEPARTMENT STABILIZATION, CADRE STRENGTH, INFRA STRUCTURE DEVT, UNIFORM ADMINISTRATION, E OFFICE CONCEPT, ALL SERVICES ON LINE IN FISHERIES
- OUT SOURCING /CONTRACT BASIS FOR TECHNICAL SUPPORT
- PRIVATISATION OF GOVT FISH SEED FARMS ON LONG LEASE TO ENTER PRENURES
- INLAND FRESH WATER FISHERIES ACT
- BANNED CHEMICALS AND ANTIBIOTICS & PROBIOTICES ACT
- ACTIVATION OF SEED ACT
- UPDATION OF INDIAN FISHERIES ACT
- ENVIROMNMENT PARAMETERS MONITORING
- RESEARCH AND DEVELOPMENT
- ALL ICAR FISHERIES RESEARCH INSTITUTES COODINATION WITH STATE DEPARTMENTS
- INTRODUCTION OF NEW SPECIES
- SPF BROOD STOCK DEVELOPMENT UNITS

SEED IMPROVEMENT

- *SEED ACT*
- *SEED QUALITY*
- *BROOD STOCK*
- *BREEDING AND REARING NEW CONCEPTS*
- *SUPPLY OF ONE INCH SEED ONLY, NO SPAWN*
- *INTENSIVE REARING OF FISH SEED IN FRP TUBS*
- *NATURAL BREEDING CONCEPT IN CANALS, FISH SEED FARMS NEW TECHNOLOGY*
- *SPAWN TO TABLE FISH SURVIVAL INCREASE PRACTICES*
- *TECHNOLOGY TRANSFER TO FARMERS*
- *EXTENSION SERVICES TO FARMERS*
- *BIO FEEDS UNITS*
- *REDUCE OF PRODUCTION COAST*
- *SUBSIDY IN INPUTS AND INFRA STRUCTURE*
- *SOLAR POWER UNITS, NEDCAP SUBSIDY*

ACTION PLAN FOR INCREASING PRODUCTION

- Minor irrigation tanks, Reservoirs, and Gram Panchayath tanks
- 1.Desilting tanks
- 2.clear the jungles
- 3.Remove the encroachments
- 4.erect cages/pens where ever possible
- 5.stock 80 mm seed
- RESERVOERS STOCKING 10 MM SEED FOR HIGER SURVIVAL
- 6.Take up Hybrid tilapia culture
- 7.Use of Floating and pellet Feed where ever possible
- 8.Ranch the big size seed in large extent

Interventions to Increase Production

- 1.Provide UN INTEREPTED power supply
- 2.provide approach roads to transport material for fish tanks
- 3.supply sufficient CONTIONUOS water
- 4.Issue permission to establish fish/prawn tanks through mee seva
- 5.Identify the aqua zones to create infrastructure facilities
- 7.Impliment seed act to control the poor quality seed
- 8.establish mobile labs in aqua zones.

Interventions to Increase Production

- 9.Desilting drains and creeks where aquaculture areas
- 10.Estblish labs to test chemicals other sanitizers quality using in aquaculture
- 11.strengthing fisheries dept. by filling all vacancies
- 12.Appoint Multipurpose Fisheries Extension officers to each mandal where the aquaculture is high like in Agriculture dept. for extension activity.
- 13.provide laptops/in Ads to improve reporting system to the FDO/AIFS
- 14.Provide 50% subsidy on feed,seed,aerators and diesel engines to small and marginal farmers
- 15.Establish Crab, Silver pompano,sea bass hatcheries in ppp mode in AP For uninterruption supply of seed

Interventions to Increase Production

- 16.Establish food processing industries to increase fish consumption
- 17.Impart training to the departmental officers on advanced technology outside the country
- 18.Provide four wheelers to the ADFs/ DDFS to monitor the culture aspects
- 19.Importence should be given to export varieties
- 20.Establish Trg cum Demo centers in each division
- 21.Establish quarantine centre at vizag
- 22.provide incurrence to fish and prawn
- 23.provide credit accessibility to aqua farmers
- 24.provide quality feed and seed to farmers
- 25.Regulate private aqua technicians by registration
- 26.Provide mobile lab

Marine sector

- MARICULTURE
- SEAWEED CULTURE
- SEA RANCHING
- DESILTATION OF RIVER MOUTHS
- CODE OF CONDUCT
- ARTIFICIAL CORAL REEFS
- ERECTION OF CAGES
- MARINE AQUARIUM FISHES UNITS
- DEVELOPEMT OF MANGROOVES
- SHELTER BELT PROGRAMME
- CRZ IMPLEMENTATION

Marketing

- STABILIZE HARVESTING/AVOID STRESS HARVESTING
- QUALITY PRORECTION
- LIVE MARKETTING
- COLD STORAGE EQUIPMENT
- ICE BOXES USAGE
- ELIMINATION OF MIDDLE MAN
- MINIMUM SUPPORTING PRICE
- INCREASE OF AVERAGE CONSUMPTION
- DOMESTIC MARKETTING/ COLD CONCEPT
- READY TO COOK
- CONSUMER ATTRACTION ADS
- Wide publicity should be given through media by celebrities to increase consumption
- BYE PRODUCTS /VALUE ADDED PRODUCTS
- DREY FISH/FISH OILS/PICKELS ETC,

Aqua Sources in the District

- Type of water source
- 78 Short seasonal Tanks -582.05
- 22 Long seasonal Tanks -208.88
- 1 Perennial Tank -8.40
- G.P Tanks
- 1231 Short seasonal Tanks -7386.00
- 976 Long seasonal Tanks -4880.00
- 455 Perennial Tanks -3640.00

Natural sources in West Godavari

S.No	Type of water resource	Extent in Ha
1	River Streches (in kms)	
	Godavari river 150 Km	65000 Ha
2	Irrigation Canals (in kms)	
	Krishna Canals 25 Kms	450 Ha
	Godavari Canals- 2100 Kms Major and Minor	30000 Ha
	Yanamadurru Drian & other small drains 250 Km	4500 ha
	upputeru	2500 Ha
3	Resrvoirs (in Hect.)	
	Errakalava	3278.01 Ha
	Kovvadakalava Reservoir	
	Nagireddygudem	
	Jilleru	242.81 Ha
4	Lakes	
	Kolleru Lake(West Godavari)	23856.58 Ha

West Godavari Action Plan Inland Facilities required to achieve the anticipated production (Interventions)

Type of Facility
fish Seed intensive rearing in Fibre tubs up to 5 inches size
Natural ,Bio feeds plankton rearing to provide bio Feeds
Mobile labs, disease diagnostic & biological disease control units
Skill Development & Trg Programmes centres for Stake holders
Post harvest Aqua hubs for Marketing and Cold Storage

WELCOME

PRIMARY SECTOR MISSION 2015-16

DEPUTY DIRECTOR OF HORTICULTURE,
WEST GODAVARI DISTRICT, ELURU

INTRODUCTION

Horticulture Potentiality in West Godavari District :

West Godavari District is potential for growing various Horticultural crops like Cashew, Mango, Coconut, Oil Palm, Banana, Cocoa, Citrus, Sapota, Guava, Vegetables, spices like Pepper, Flowers, Medicinal and Aromatic plants. Due to available resources like land, irrigation and other infrastructure facilities, there is a vast scope for the development of Horticulture in this district.

Horticulture crops are growing in an area of 1.46 Lakh Hectares out of the net-cropped area of 4.45 Lakh Hectares constitutes 32.80%. 85% of the Horticulture crops are grown in 24 upland Mandals and 15% in 22 delta areas. West Godavari Districts stands first in Oil palm and Cocoa both in area and production.

PRIMARY SECTOR MISSION (HORTICULTURE) - 2014-15

Major Horticulture crops Grown ina the District	Extent available in the district Area(Ha) up to (31.3.2015)	Area under Production upto 2014-15	Production (MTs)	Productivity (MT/Ha)	Average Market (Price based od 2014-15 Fig. in year) Rs/Ton	Total Value.(Rs. In Lakhs) (3*5)
1	2		3	4	5	6
I.Short term Crops						
1. Banana(Local)	5170	5170	183535	35.5	9500	17435.83
2.T.C. Banana	4763	4763	214335	45	8100	17361.14
3. Papaya	229	229	17862	78	6000	1071.72
4. Tomato	312	312	6240	20	4000	249.60
5.Onion	0	0	0	0	0	0
6. Red Chillies	92	92	184	2	7000	13
7.Green Chillies	0	0	0	0	0	0
8.Potato	0	0	0	0	0	0
9.Turmeric	197	197	985	5	65000	640.25
10.Garlic	0	0	0	0	0	0
11.Zinger	0	0	0	0	0	0
12. Pine Aplle	0	0	0	0	0	0
13.Water Melon	106	106	5300	50	5000	265.00
14.Musk Melon	0	0	0	0	0	0
15.Veg. Crops in the District	4578	4578	91560	20	8000	7324.80
16.Fower Crops in the Distict	59	59	550	9.3	30000	165.00
17.Other if any (specify)	0	0	0	0	0	0
Sub-Total	**15506**	**15506**	**520551**		**142600**	**44526.21**

PRIMARY SECTOR MISSION (HORTICULTURE) - 2014-15

Major Horticulture crops Grown in the District	Extent available in District Area(Ha) up to (31.3.2015)	Area under Production upto 2014-15	Production (MTs)	Productivity (MT/Ha)	Average Market (Price based od 2014-15 Fig. in year) Rs/Ton	Total Value.(Rs. In Lakhs) (3*5)
1	2		3	4	5	6
II.Long term Crops						
1.Mango	8500	8412	84120	10	10000	8412.00
2.Cashew	17165	17165	8582.5	0.5	95000	8153.38
3.Sweet Orange	262	262	2096	8	12000	251.52
4.Acid Lime	3800	3720	29760	8	3000	892.80
5.Pomegranate	0	0	0	0	0	0
6.Sapota	500	500	3500	7	2800	98.00
7.Guava	1000	960	17280	18	7500	1296.00
8.Cocoa	12000	11000	7920	0.72	150000	11880.00
9.Coconut (Nos per Plant)	23000	20000	2700 Lakh Nuts	13500 Nuts	5 per Nut	13500.00
10. Oil Palm	65000	40000	800000	20	6500	52000.00
11. Other if any (specify)	0	0	0	0	0	0
Sub-Total	**131227**	**102019**	**959558.5**		286805	96484
III. Existing P C						
1. Poly House cultivation(sqmt)						
i. vegetables (specify Crops) Capsicum	0.718	0.718	64.62	90	30000	19.39
ii.Flowers (specify Crops)	0	0	0	0	0	0
15.Shade Net Houses (sqmt)						
i.Nurseries (specify Crops)	0	0	0	0	0	0
ii.Vegetables. (specify Crops) Tomato	0.4	0.4	14	35	5000	0.70
iii.Floweres (specify Crops)	0	0	0	0	0	0
Sub-Total	**1.118**	**1.118**	**78.62**		**35000**	**20.086**
12.Grand Total	**146734.12**	**117526.12**	**1480188**		464405	141029.99

Additional Area Proposed during 2015-16 to Achieve Double Digit Growth on the existing Dist.GDP

Sl. No	Name of the Crop	Units No/sqmt/Ha	Extent available production in District Area(Ha) up to (31.3.2015)	Additional Area Proposed (Ha) (2015-16)	Total Area available in the District up to 31/03/2016 (4+5)	Expected Productivity due to proposed Interventions (MTs/Ha)	Expected Production by the following Interventions (MTs/Ha)	Average Market Price(Rs.Mts) (based on 2014-15 prices	Total value(Rs.in Lakhs) (6X8)	Financial Budget requirement (Rs. In Lakhs)	Interventions proposed to increase Production/Productivity
1	2	3	4	5		6	7	8	9	10	11
1	**I.Short term Crops**										
	1.Banana	Ha	9933	1000	10933	53	579449	8800	50991.51	643.45	Development of New Gardens with drip integration by utilizing Tissue culture plants duly adopting improved package of practices.
3	2. Papaya	Ha	229	200	429	80	34320	6000	2059.20	96.04	New gardens with high yielding Thaivan varieties like Red lady with micro irrigation & Mulching.
	3. Tomato	Ha	312	100	412	25	10300	4000	412.00	3.00	Use of F1 hybrids, semi indeterminate type under trellies, polyhouse /shadenet cultivation with the drip integration.
5	4.Onion	Ha	0	0	0	0	0	0	0.00	0	--
	5. Red Chillies	Ha	92	200	292	2.5	730	70000	511.00	24.00	Cultivation of F1 Hybrid with integration of drip and Mulching.
	6.Potato	Ha	0	0	0	0	0	0	0.00	0	--
8	7.Turmeric	Ha	197	100	297	6	1782	65000	1158.30	12.00	Use of high yielding varieties with micro irrigation
	8. Pine Aplle	Ha	0	0	0	0	0	0	0.00	0	--
10	9.Water Melon	Ha	106	150	256	60	15360	5000	768.00	4.50	Encourage cultivation under drip integration with Mulching duly utilizing usage of micro nutrientients.
11	10.Musk Melon	Ha	0	0	0	0	0	0	0.00	0	--
1	11.Major 5 Veg. Crops (Specify) Bhendi, Bitter gourd, Ridge gourd, Bottle gourd, Brinjal	Ha	4578	430	5008	23	115184	8000	9214.72	12.90	Encourage cultivation of F1 hybrids for bhendi. Cultivation of gourds under permanent/ semi permanent pandals with drip integration & mulching
13	12.Major 5 Fower Crops (Specify) Crossandra, Jasmine, Marrigold, Lilly	Ha	59	50	109	11	1199	30000	359.70	8.00	Cultivation with Drip and Mulching

Additional Area Proposed during 2015-16 to Achieve Double Digit Growth on the existing Dist.GDP

Sl. No	Name of the Crop	Units No/sqmt/Ha	Extent available production in District Area(Ha) up to (31.3.2015)	Additional Area Proposed (Ha) (2015-16)	Total Area available in the District up to 31/03/2016 (4+5)	Expected Productivity due to proposed Interventions (MTs/Ha)	Expected Production by the following Interventions (MTs/Ha)	Average Market Price(Rs.Mts) (based on 2014-15 prices	Total value(Rs.in Lakhs) (6X8)	Financial Budget requirement (Rs. In Lakhs)	Interventions proposed to increase Production/Productivity
1	2	3	4	5		6	7	8	9	10	11
1	14. Poly House cultivation(sqmt)				0		0		0.00		--
	i.High values vegetables (Capsicum)	Ha	0.718	0.5	1.218	110	133.98	30000	40.19	22.50	Cultivation with raised beds & mulching sheet with the establishment of trellies.
	ii. High value Flowers.	sqmts	0	0	0	0	0	0	0.00	0	--
	15.Shade Net Houses (sqmt)				0		0		0.00		--
	i.Nurseries	sqmts	0	0	0	0	0	0	0.00	0	
	ii. High value Vegetables (Tomato)	Ha	0.4	1.6	2	40	80	5000	4.00	53.25	Cultivation of indeterminate types with raised beds & mulching during off season months.
	iii.High Value Flowers	sqmts	0	0	0	0	0	0	0.00	0	
	II.Long term Crops				0		0		0.00		
1	1.Mango	Ha	8412	88	8500	11	93500	10000	9350.00	26.36	
15	2.Cashew	Ha	17165	0	17165	0.7	12015.5	95000	11414.73	0.00	
18	3.Sweet Orange	Ha	262	0	262	10	2620	12000	314.40	0.00	
1	4.Acid Lime	Ha	3720	80	3800	10	38000	3000	1140.00	24.45	Encourage high density plantation for new plantations. Motivating farmers to take up rejuvenation/ canopy management practices in old orchards. Application of fertilizers as per soil analysis reports. Providing micro irrigation under irrigated conditions.
0	5.Pomegranate	Ha	0	0	0	0	0	0	0.00	0	
1	6.Sapota	Ha	500	0	500	8	4000	2800	112.00	0.00	
	7.Guava	Ha	960	40	1000	22	22000	7500	1650.00	21.08	
3	8.Cocoa	Ha	11000	1000	12000	0.9	10800	150000	16200.00	130.00	
	9.Coconut (Nos per Plant)	Ha	20000	1200	21200	15000	318000000	5	15900.00	90.00	
5	10. Oil Palm	Ha	40000	7250	47250	22	1039500	6500	67567.50	1740.00	
	11.Other if any (specify)	Ha	0	0	0	0	0	0	0.00	0	
	Sub-Total				0				0.00		
	Grand Total		**117526.12**	**11890.1**	**129416.218**	**15495.1**	**31998097 3.5**	**455605**	**189167.25**	**2911.54**	

Rs.48,137.26 Lakhs (Rs.1,89,167.25 Lakhs – Rs.141029.99 Lakhs) additional value is projected during 2015-16 over the value of produce pertaining to 2014-15

PRIMARY SECTOR MISSION-HORTICULTURE - Interventions Proposed during 2015-16

Sl.No	Name of the Crop	Micro Irrigation		Mulching		Farm Ponds		Pandal Cultivation		Trallies Cultivation		Canopy Management		Rejuvanation	
		Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	T.C Banana														
2	Banana	545	361.29												
3	Papapa														
4	Tomato														
5	Onion														
6	R.Chillies														
7	Turmeric														
8	Water Malon														
9	Musk Malon														
10	Pine apple														
11	Major Veg.Crops 6 Nos														
12	Major Flower Crops 6 Nos														
13	Potato														
14	Zinger														
15	Capsicum														
16	Hy.Tomato														
17	Sub-Total	545.00	361.29	24.10	3.86	0.00	0.00	50.00	125.00	20.00	3.80	0.00	0.00	0.00	0.00
	Fruits														
17	Mango	56	11.64												
18	Cashew														
19	S.Orange														
20	Acide Lime	321	93.1												
21	Pomegranete														
22	Sapota														
23	Guava	33	9.57												
24	Cocos														
25	Coconut														
26	Oil Palm	15825	5223.36												
27	Other if any	3220	2367												
	Sub-Total	**19455**	**7704.67**	**0**	**0**	**20**	**15**	**0**	**0**	**0**	**0**	**400**	**24**	**400**	**66**
	Grand Total	**20000.0**	**8065.96**	**24.10**	**3.86**	**20.00**	**15.00**	**50.00**	**125.00**	**20.00**	**3.80**	**400.00**	**24.00**	**400.00**	**66.00**

PRIMARY SECTOR MISSION-HORTICULTURE - Interventions Proposed during 2015-16

Sl.No	Name of the Crop	Protected Cultivation Poly Houses (sqmts)				Shadenet Houses (sqmts)						IPM on					
		Vagetables (sqmts)		Flowers(sqmts)		Nurseries		Vagetables (sqmts)		Flowers(sqmts)		Vegetables		R.Chillies		Mango	
		Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs	Physical Ha	Financial Rs.in Lakhs
1	2	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1	T.C Banana																
2	Banana																
3	Papapa																
4	Tomato																
5	Onion																
6	R.Chillies																
7	Turmeric																
8	Water Malon																
9	Musk Malon																
10	Pine apple																
11	Major Veg.Crops 6 Nos																
12	Major Flower Crops 6 Nos																
13	Potato																
14	Zinger																
15	Capsicum																
16	Hy.Tomato																
17	Sub-Total	0.50	22.50	0.00	0.00	0.00	0.00	1.50	53.25	0.00	0.00	600.00	7.20	0.00	0.00	0.00	0.00
	Fruits																
17	Mango																
18	Cashew																
19	S.Orange																
20	Acide Lime																
21	Pomegranete																
22	Sapota																
23	Guava																
24	Cocos																
25	Coconut																
26	Oil Palm																
27	Other if any																
	Sub-Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**300**	**3.6**
	Grand Total	**0.50**	**22.50**	**0.00**	**0.00**	**0.00**	**0.00**	**1.50**	**53.25**	**0.00**	**0.00**	**600.00**	**7.20**	**0.00**	**0.00**	**300.00**	**3.60**

Primary Sector Mission

ACTION PLANS

28 APRIL 2015

LIVE STOCK

Growth Engine of West Godavari District

Sl. No	Growth Engine	2013-14		2014-15		2015-16		Projected % Increase over 2014-15	
		Production	GVA @Current Prices (Rs Cr)	Production	GVA @Current Prices (Rs Cr)	Production	GVA @Current Prices (Rs Cr)	Production	GVA (Rs Cr)
1	Milk (MT's)	832490	1924.1	850967.4	2021.3	950000	2546	12	24
2	Meat(MT's)	29852	782.27	27922	461.4	32000	528.91	14	14
3	Egg(Lakh No's)	19782	369.23	21263.81	467.71	23000	505.84	8	8

Growth Engine- Milk

Sector	Productive Animals in Lakh Numbers			Productivity Per Animal In Kgs per day			Production per Year Lakh Metric Tons			Production Value (Rs in Crores)		Projected Growth for 2015-16	
	2014-15	2015-16	% of Increase	2014-15	2015-16	% of Increase	2014-15	2015-16	% of Increase	2014-15	2015-16	Inc in Value (Rs in Crores)	% of increase
a) Milk from Crossbred Cows	0.316	0.345	9.00	7.697	8.24	7.05	0.74	0.85	14.86	176	228	52	30
b) Milk from Non Descriptive Cows	0.453	0.430	-5.00	2.477	2.58	4.16	0.34	0.34	0.00	81	91	10	12.34
c) Milk from Graded Murrah Buffaloes	2.225	2.425	9.00	7.612	8.14	6.94	6.19	7.10	14.70	1469	1903	434	30
d) Milk from Non Descriptive Buffaloes	0.953	0.905	-5.00	3.946	4.21	6.56	1.19	1.20	0.84	283	322	39	13.78
Sub- Total	*3.947*	*4.105*	*4.00*	*5.43*	*5.79*	*6.17*	*8.46*	*9.49*	*12.17*	*2009*	*2544*	*535*	*26.63*

Growth Engine- Egg

Sector	Birds in Lakh Numbers			Eggs / year			Crore Eggs			Production Value (Rs in Crores)		Projected Growth for 2015-16	
	2014-15	2015-16	% of Increase	2014-15	2015-16	% of Increase	2014-15	2015-16	% of Increase	2014-15	2015-16	Inc in Value (Rs in crores)	% of increase
Egg Production													
a) Eggs from Backyard Poultry	12.97	13.61	5.00	60.00	63.00	5.63	7.78	8.57	10.15	17.31	18.84	1.53	8.83
b) Eggs from Commercial Poultry	135.00	141.75	5.00	154.00	156.00	1.00	207.90	221.13	13.23	461.66	486.44	24.78	5.36
Sub- Total	*147.97*	*155.36*	*5.00*	*107*	*110*	*3.31*	*215.68*	*229.70*	*11.69*	*478.97*	*505.28*	*26.31*	*7.09*

Actvities under each growth engine

Milk

1 .Improving the Average Milk Yield of High Yielding Milch Cattle (6 Litres per Day and above) by 2 Litres per Day

2.Identification of 100 Progressive Dairy Farmers (producing >200 Lts/Day) and providing Bank linkages to increase the number of animals and production

3.Identification of 50000 SHGs involved in Dairying and improving productivity of their animals

4. Identification of high genetic female Heifers between 18 to 20 months

5. Identification of improved progeny calves born through Artificial Insemination programme through Save Calf Programme

Meat:-

6. Ram Lamb Exchange, Grazing lands to Shepherds, Modern Slaughter houses, Meat Outlets/Meat Processing and Export Oriented Units for Meat and Eggs

STRATEGIES UNDER EACH GROWTH ENGINE

MILK

1.Breed Improvement Activities

Sexed Semen / Embryo Transfer Technology

Coverage of 30,000 additional Breeding Female Cattle and Buffaloes through NGOs

2.Fodder Production Activities

Feed and Fodder distribution under Drought Mitigation

Nutritional supplementation to 20000 animals

3. Management Animal Hostel

Animal hostels

Nutritional supplementation to 1500 animals

Reducing Inter Calving Period in 400 animals

Additional Milk Production through AH Departmental activities

4. Awareness and Capacity Building

Training 50,000 Farmers whose animals are yielding 6 Lts per day and above

5. Credit facilities

Promoting 10 Big Dairy Farmers who produce more than 200 Litres per day

THANK YOU ONE AND ALL

AP Primary Mission: West Godavari Pilot Site

29 April 2015

Bases for selecting Pilot villages

Criteria of village selection

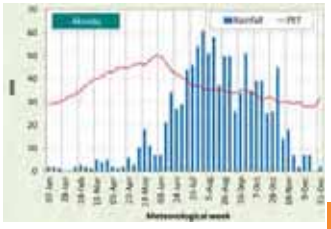
- Representing dry land and delta region of district
- Capturing major cropping/farming system of the district
- Technology should be scalable to other mandal in future
- Block approach

Process involved

- Meeting with District administrator (Collector and CPO)
- Meeting with Line department officials at district and Mandal level
- Interaction with farmers and community

Agro climate characterization

Mandal	Parameter	Kharif	Rabi	Annual
K.Kota	Rainfall (mm)	899	94	1065
	PET (mm)	724	685	1809
Akividu	Rainfall (mm)	837	131	1033
	PET (mm)	763	728	1913



Identified pilot villages in West Godavari

SN	illages	No of HHS	Populat ion	Geographi c area (ha)	Agriculture land (ha)	Horticult ure area (ha)	ish pond area (ha)	Prawn area (ha)
	ivedu Mandal							
1	harmapuram	232	1010	508	280	-	160	45
2	Taratava	177	640	240	1	-	168	53
3	Siddapuram	1851	6312	12	523	-	210	52
4	Madivada	1876	68 0	616	32	-	170	40
5	Akivedu	6775	24506	1111	2 7	-	600	214
6	umpagadapa	1508	5467	3 8	181	-	44	32
7	A. Bheemavaram	1326	4554	703	378	-	126	42
8	Cherukumilli	1078	3750	671	470	-	82	3
	. ota Mandal							
	. ota	4885	167 0	3765	3014	873	-	-
10	ammanapalem	402	1520	510	451	263	-	-
11	adavalli	5 6	3571	804	706	25	-	-
Total		20706	75010	10625	6647	13 5	1560	517

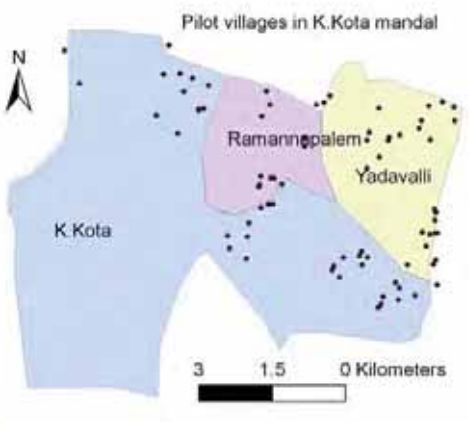
Animal, sheep/goat and poultry population in selected pilot villages

SN	illages	Animal population	Sheep Goat population	Poultry (No)
	ivedu Mandal			
1	harmapuram		0	38
2	Taratava		0	515
3	Siddapuram	21 6	426	2035
4	Madivada	1040	0	37
5	Akivedu	1147	222	4 33
6	umpagadapa	605	8	566
7	A. Bheemavaram	705	24	3702
8	Cherukumilli	73	468	1541
	. ota Mandal			
	. ota	1238	305	15562
10	rammanapalem	30	300	418
11	adavalli	2 6	541	1831

Crop and village wise coverage of micro-irrigation system in selected pilot villages of K.Kota mandal

o	. ota	RAMANNAGUDEM	EAST YADAVALLI	Total
t a	1	1	1	4
a a o	1	3	0	15
a a a	3		3	37
a	1	0	0	1
l al l t o		8		164
o o tl t o	1	3	5	22
a a	3	0	0	3
o t		1	1	24
	140	76	53	269

Soil sampling in K.Kota mandal



Crop	No of samples
	10
a a a	1
a t	
l al	3
o o t	11
a	
a	33
a a	5
ta l	
l	
	1 0

Proposed Interventions in Agriculture

	Intervention description	Scale (ha)	Expected benefits
	Agriculture		
1	Soil test based fertilizer application including secondary and micro-nutrients	80% coverage	10-20% increase in crop yield
2	Expanding Maize in fallow land;	50 ha	High Land and Water use efficiency; increased cropping intensity
3	Promoting high value crop like Baby corn; Sweet corn	20 ha	Increased farmer income by 30% than base line
4	Drip irrigation in field crops like Maize	10 ha	Increase water and fertilizer use efficiency; water and fertilizer saving; increased yield by 10-15%
5	Introduction of high yielding paddy variety resistant to salinity and flooding	50 ha + 50 ha	Increased yield by 15-20%
6	Water conservation practices like Broad bed and furrow practices; use of zero-tillage and mulching	100 ha	Higher WUE; increased yield by 10%
7	IPM, Weed management	100 ha	Increased yield by 15-20%

Expected GVA and growth in Agriculture

Crop	Current GVA in Year 2014-15			Expected GVA for Year 2015-16			
	Area in Ha	Production (tons)	G A (Crore)	Area in Ha	Production (tons)	G A (Crore)	Growth rate
harif Paddy	2 15	14226	1 .3	2 15	15442	21.0	
abi Paddy	2502	18076	24.6	2502	1 621	26.7	
harif Mai e	41	224	0.3	41	243	0.3	
abi Mai e	877	7630	10.0	77	23	12.1	21
Sugarcane	104	8 16	2.0	104	50	2.2	12
Cotton	26	21	0.1	41	36	0.1	72
			5 .			2.	11

Proposed Interventions in Horticulture

	Intervention description	**Scale (ha)**	**Expected benefits**
	Horticulture		
1	Soil test based micro-nutrient application	80% Area	Increased yield by 10% and income
2	Expanding drip irrigation system; Irrigation and fertigation scheduling	200 ha	Increased WUE; reduce cost of cultivation; water and fertilizer saving; increased yield by 15-20%
3	Promoting intercropping in Oil palm	100 ha	Additional income for farmer; Higher resource use efficiency; increased income by 30%
4	Capacity building of existing drip farmers on irrigation and fertigation scheduling	100 ha	Increased resources use efficiency;
5	Promoting tissue culture Banana	50 ha	Higher income;

Expected GVA and growth in Horticulture

Crop	Current GVA in Year 2014-15			Expected GVA for Year 2015-16			Growth rate
	Area in Ha	Production (t)	G A (Cr.)	Area in Ha	Production (t)	G A (Cr.)	
Palm il	7	17615	11.4	107	21545	14.0	22
Cashewnut	145	142	0.1	145	157	0.1	10
Mango	40	315	0.4	43	375	0.5	1
Coconut	75	2048706	1.2	105	3272232	2.0	60
Acid lime	56	1101	1.7	56	1228	1.8	12
egetable	1	253	0.4	1	354	0.5	40
Banana	40	20	0.8	100	3000	3.0	445
			16.1			22.0	44

Proposed Interventions of Animal Husbandry

	Intervention description
1	Increased quality/ green fodder availability
2	Expanding milk routes in existing areas
3	Increase in procurement in existing centers
4	Promoting dairy enterprises
5	Reviving of Bulk milk collection Centre
7	Vaccination, regular health monitoring;
8	Feed supplementation;
9	Up-gradation of non-descriptive to graded Murrha
10	Animal hostel
11	Intensive rearing of sheeps

Current GVA of Animal Husbandry

SN	Village	Animal population	Milk Production (M Tons)	Sheep /Goat	Meat (M tons)	Chiks no	Egg No	2014-15 GVA (cr.)
	Akivedu							
1	Dharmapuram	222	320.29	0	0.38	738	23450	0.72
2	Taratava	99	594.81	0	0.46	515	30325	1.33
3	Siddapuram	2196	497.35	426	2.16	2035	99705	1.18
4	Madivada	1040	617.80	0	0.61	379	49125	1.39
5	Akivedu	1147	798.48	222	2.06	4933	187538	1.86
6	Dumpagadapa	605	965.14	8	1.12	566	76935	2.17
7	A. I Bheemavaram	705	86.73	24	2.54	3702	149020	0.30
8	Cherukumilli	739	72.93	468	1.02	1541	71360	0.21
	K.Kota Mandal							
9	K.Kota	1238	1490.01	305	36.39	15562	2416000	4.85
10	rammanapalem	930	979.61	300	13.59	418	66000	2.58
11	Yadavalli	296	1623.06	541	19.95	1831	290000	4.23
								20.80

Proposed Interventions of Fisheries

	Intervention description
1	Providing lab facility, soil water, disease diagnosis
2	Providing SPF quality seed
3	Providing input subsidy
4	Liberalization of licenses policy
5	Finance through banks
7	Insurance coverage to crop
8	Training to farmers in good management practices
9	Control of spurious drugs and medicines
10	Establishment of new varieties hatcheries
11	Providing cold storage facilities

Current GVA of Fisheries sector

Fish	Pond area (Ha)	Productivity (t ha)	No of crops year	Production (tons)	MRO (RS/Kg)	GVA (Crore)
Inland Fish	1560	10.0	2	31064	100	**310.64**
Prawns	517	5.4	2	5632.00	400	**225.28**
Total	2077		2			**535.92**

Thank you!

PIs Monitoring system

Objective

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- a a ato t a t a l ato

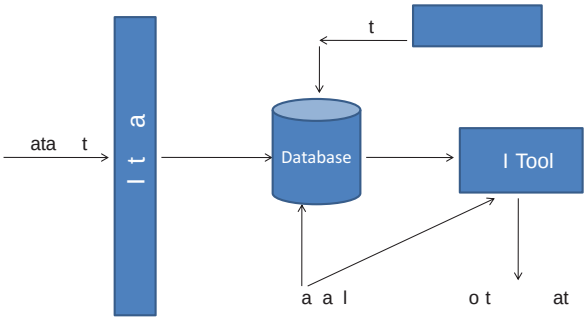
STATE HOL ERS:

- Hon'ble Chief Minister
- Officials of Planning department
- All Head of Departments (HoDs)
- CGG officials

ROLE OF CGG:

- CGG is the technical partner for development of this M&E system

Solution overview



Assumptions

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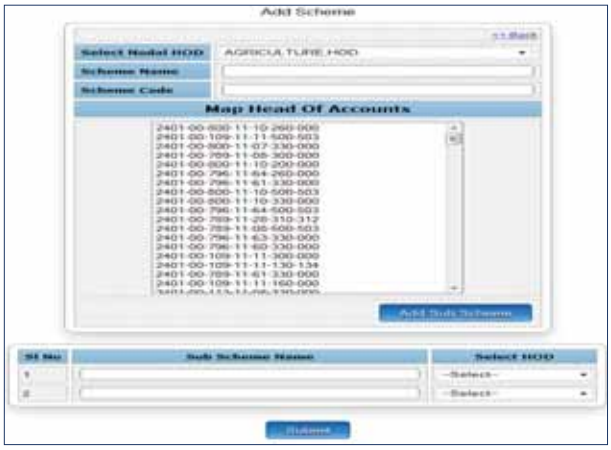
MASTERS

1. Add Schemes
2. Add Indicators
3. Add Unit
4. Data level of Indicators

MASTER : A SCHEME



MASTER : Add Sub Scheme to an Existing Scheme

Master: Add Indicator

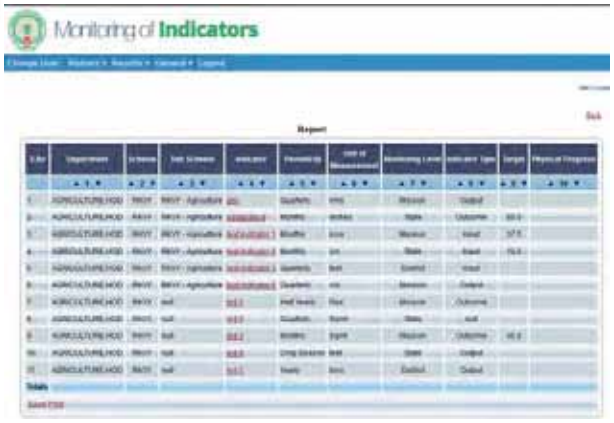
Master: Add Unit

MASTER : ata Level of indicators

INPUT : IN ICATOR TARGETS

INPUT : Physical Progress

OUTPUT : PHYSICAL PROGRESS REPORT



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Indicator performance (%)			
Agriculture Production	Achieve:	Target:	Status: %

Primary Sector Mission		
Indicator Name	Target	Achievement
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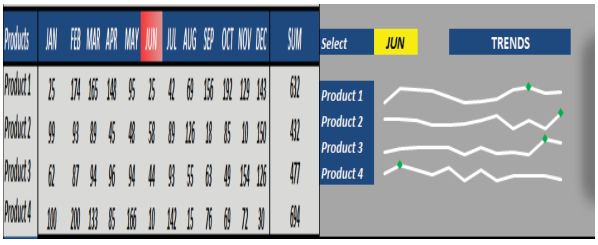
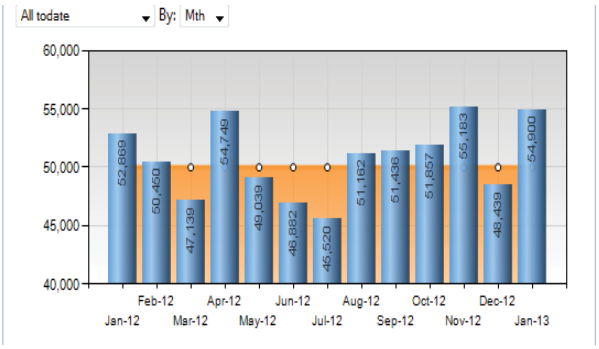
o to		
t o to		

OUTPUT FORMATS

TREND REPORTS



OUTPUT FORMATS – GRAPHICAL REPORTS



CENTRE FOR GOOD GOVERNANCE
Knowledge • Technology • People

Thank You

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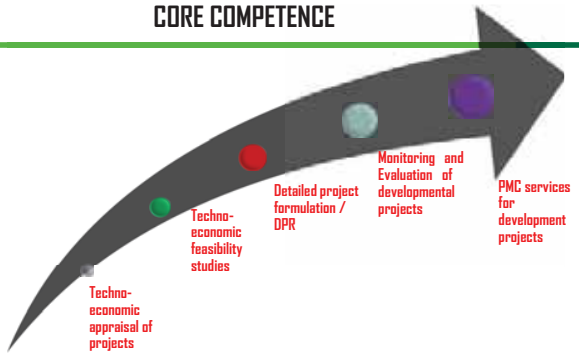
Wisdom Beyond Business

ABOUT US

- NABARD Consultancy Services (NABCONS) is wholly owned subsidiary of NABARD
- Leader in agriculture and rural development consultancy
- ISO 9001:2008 certified company
- Pan India Presence

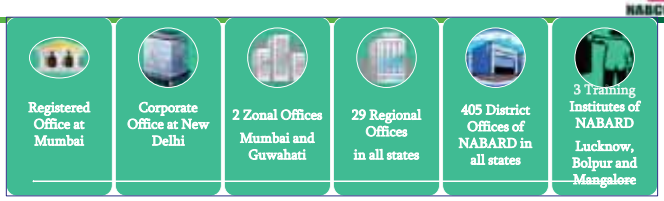
WISDOM BEYOND BUSINESS

CORE COMPETENCE



WISDOM BEYOND BUSINESS 5

OUR PRESENCE



NABCONS
RTC X Road ,
Musheerabad
Hyderabad

WISDOM BEYOND BUSINESS

DIVERSE HUMAN RESOURCE

Corporate Office	Zonal Offices	Regional Office	NABARD
15 professional staff- -Technical experts -Finance & management Experts -Economists -Others 10 Support Staff Project based consultants as and when required	30 Professional staff - Technical experts -Finance Experts -Economists -Others 15 support staff	29 Principal Consultants 29 Senior Consultants and 15 Consultants 405 District Development Managers PMU staff	Pool of 2500 experts Empanelled retired experts

WISDOM BEYOND BUSINESS

Business Verticals

NABCONS has undertaken 1700 assignments across its 7 Business Verticals

- Agriculture and Animal Husbandry
- Food Processing and Storage
- Third Party Monitoring
- Technical Support Agency for Government of India
- Socio Economic Studies
- Banking & Finance
- International Visitors Programme

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(₹ crore)

Sr. No.	Sector	Estimated Potential
I	Crop Production, Maintenance and Marketing	50979
II	Term investment for agriculture and allied activities	
1	Water Resources	987
2	Land Development	764
3	Farm Mechanisation	2152
4	Plantation and Horticulture & Sericulture	1709
5	Forestry and Waste Land Development	255
6	Animal Husbandry – Dairy Development	4277
7	Animal Husbandry – Poultry Development	1098
8	Animal Husbandry - Sheet/ Goat/ Piggery Development	1316

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(₹ crore)

Sr. No.	Sector	Estimated Potential
9	Fisheries Development	1803
10	Storage Godowns / Market Yards	1079
11	Renewable Sources of Energy and Waste Management	1087
12	Other Activities	2043
	Total Agri. Term Loan	18570
	Total investment under agriculture and allied activities(I+II)	69549
III	MSME (Including Food and Agro Processing)	11997
IV	Other Priority Sector including Self Help Groups	17133
	Total Priority Sector (Agriculture + MSME + OPS)	98679

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Crop/Activity Plans – Concept and NABCONS role

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Activities Identified

- Maize
- Rice
- Tomato
- Chillies
- Dairy
- Fisheries

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Status
- Major cereal crop of the State - AP & Karnataka contributing 38% of national production
- 22.13 lakh MT production, avg. productivity 6.286 MT per hectare
- Productivity low as compared to international standards

Issues
- Vast yield gap in different districts
- Kharif season productivity low
- Mainly rain-fed and cultivated by SF/MF
- Limited adoption of production technology
- Lack of quality inputs and lack of PHM & marketing efforts
- Inadequate processing facilities

Status
- Major staple crop of the State –grown in different agro climatic conditions
- Avg. productivity 30.09 Q/ha. , highest Nellore (38.11 qtls/ ha) , lowest Vishakhapatnam (16.04 qtl.ha)
- Productivity low as compared to international standards

Issues
- Lack of quality seeds
- Lack of balanced use of fertiliser & pesticides
- Monoculture of Rice
- Rice production & climatic Change
- Poor Water Management
- Lack of Post Harvest Mgmt (10-37% losses)
- Marketing issues (dependency model, sale of field standing crops) & Credit related issues

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Status
- 1st among chilli producing states in the country
- Production 6 lakh tonne (50% of the country's production)

Issues
- Need to improve quality seed
- Excessive use of chemical fertiliser
- Unscientific post harvest management – Increased level of aflotoxin leading to rejection of export
- Exploitation at various levels of marketing
- Credit related issues

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Status
- 1st among tomato producing states in the country
- Production 5.9 lakh Tonne – Chittoor alone 2.6 lakh Tonne

Issues
- Poor quality seed / Spurious seeds
- Pest & Disease infestations
- Excessive use of chemical fertiliser
- Unscientific post harvest management
- Exploitation at various level of marketing
- Credit related issues

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Status
- Total value of livestock produce Rs. 13743 crore (2004-05 base price)
- Contributes 5.5% of total GSDP, 23.5% to Agri GSDP
- State position 7th in India
- During 2007-12 decrease in population of cattle and buffalo

Issues
- Need for improving livestock population, milk production, marketing, vet infra and breeding, product promotion, management, institutional credit etc.

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Status
- 17.69 lakh tonne of fish and prawn production in 2013-14
- The Sector contributes 3.63% of GSDP

Issues
- Involvement of Multi-agencies – lack of synergy
- Non availability of specific agencies to provide end-to-end service to farmers, processors, exporters and fishers
- Lack of fish farmers' association / federations
- Lack of infrastructure for input service & marketing

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- Conduct study to identify reasons for low production / productivity
- Preparing banking plan and formulating strategy / projects for increasing production and productivity
- Preparation of comprehensive perspective plan for development of value chain
- Need based capacity building for various stakeholders
- Monitoring of ongoing schemes and suggesting remedial measures
- Assist in creating IT based MIS
- Conduct evaluation study of the projects

Thank You

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Process

- Potential assessment - SWOT analysis
  - Scope and opportunities, limitations
- Identification of critical gaps in production and post-production process
  - Technology & extension gaps
  - Input supply gaps
  - Credit gaps
  - Post-harvest handling & storage gaps

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Process

- **Suggested interventions**
  - Technology facilitation through training, capacity building and hand-holding
  - Linking input suppliers with farmers groups / end users
  - Realistic Credit need assessment –
    - Review of investment and production credit needs
    - Banking plan approach for institutional credit dispensations
    - Convergence with GoI / State Govt. programmes – subsidy / interest incentives (Eg. MIDH, NMSA, NMOOP, NFSM, etc.)
  - Identify post-harvest infrastructure (sorting, grading, warehouse, transport, etc.) for private investment and / or PPP mode and credit facilitation
  - Accreditation of warehouse infrastructure to facilitate warehouse receipt financing

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Process

Implementation process

- Stakeholders identification
- Training and capacity building and hand-holding – facilitation through credible and experienced NGOs
- Technology and credit facilitation
  - Banking plans, investment specific plans
- ***Farmers institutions promotion – POs/ FPCs***
  - Promotion, nurturing and handholding support
  - Training and capacity building in production and marketing
  - promotional support under PRODUCE
  - Aggregation , processing / value addition by POs

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Process

- **Marketing** – Explore Alternate market channels to reduce market intermediaries
  - **Raithu Bazaars as aggregation points for bulk sales – *Spoke & Hub***
  - Commodity markets
  - Distant Markets
  - Bulk consumers
  - Processors
  - Exporters
  - Agri- retailers

Process

- ***Overall Financial Projections and sources of funding***
  - Credit/Private investment
  - Budgetary
  - Convergence
  - Other sources including RIDF

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Process

- **Monitoring**
  - Bench marking Outcome/Out put parameters
  - Project specific monitoring mechanism
  - Focus on ICT enabled monitoring system , if not real –time monitoring

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नाबार्ड NABARD

Regional Workshop on Promotion of Farmer Producer Organi ations
12 February 2015

NABAR INITIATIVES STRATEGY

SMALL HOLDER AGRICULTURE

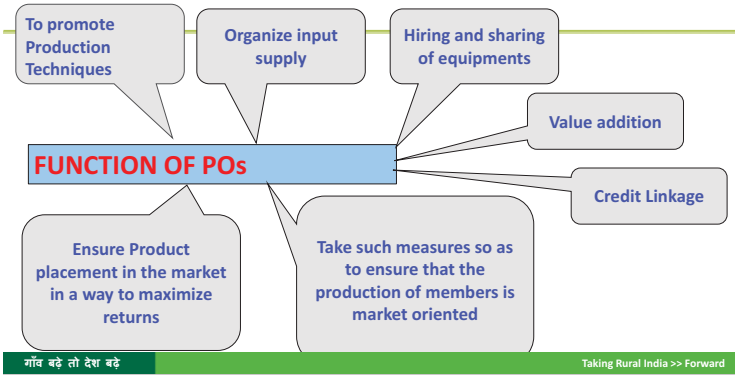
- The share of SF & MF accounted for around 85% of operational holdings in 2010-11 as compared to about 62% in 1960-61. Average size has declined to 1.16 ha.
- Area operated by SF & MF has increased from about 19% to 44%.
- In terms of production, SF & MF make larger contribution to the production of high value crops. Contribute 70% of vegetables prod., 55% of fruits, 52% of cereal prod., 69% in milk production. Thus, **small farmers contribute to both diversification and food security**.
- The small holding character of Indian agriculture is much more prominent today than even before.
- The future of sustainable agriculture growth and food security in India depends on the performance of SF & MF.

CHALLENGES FACED BY SMALL HOLDER AGRICULTURE

- Access to inputs, technology, markets & poorly developed supply chain
- Lack of hassle free access to credit results in high dependency of farmers on number of intermediaries. Need a level playing field with large farms.
- Output price fluctuations: Different models emerged for marketing collectively by SF&MF.
  - SHG model, Co-operative model, Small Producer Co-operatives and Contract farming.
  - *Apni Mandi in Punjab, Rytu Bazars in* AP, dairy co-operatives in marketing.
- Lack of assured income and frequent crop failures.
- Real challenge: Organising the SF & MF for marketing and linking them to high value agric.
- The National Commission for Enterprises in the Unorganized Sector (NCEUS) has considered 4 important group approach models to benefit from the economies of scale.
  - Co-operatives, Producer's Companies, Farmers' groups such as SHG in Andhra Pradesh SEWA (Self Employed Women's Association) in Gujarat and 'Kudumbashree' in Kerala.
- **Strategy** : **Shrinking the Marketing Chain and Promotion of FPOs.**

DEFINITION OF PRODUCER ORGANIZATIONS

- Formed and owned by a group of producers for either farm or non-farm activities
- It is a registered body and a legal entity
- Producers are shareholders in the organization
- It deals with business activities related to the primary produce/product.
- It works for the benefit of the member producers
- Portions of profit are shared amongst the producers and the balance goes to the share capital or reserves



Institutional Models of Producer Organisations

Informal collectives	Formal collectives	Producer companies
• JLG/Self-Help Groups • Farmers groups/Association • Farmer's Club • Federations	• Formal collectives like Cooperatives (under old Cooperative Acts, Liberal Cooperative Acts and Multi State Cooperative Societies Act) ▪ Long history of producer collectives - Cooperatives in fishery, sugar and dairy • Societies and Trusts	• Producer companies established under the Companies Act

Legal forms

Producer Cooperative	Producer Company	Public limited company
Registered under the cooperative societies act	Registered under section I A of companies act as producer co. new insertion amended in 2002	Registered under the companies act as public limited
+Can have nominal members other than producers	+Can have 50 members , no min capital (unlike pvt. ltd.)	+Can get external equity (FabIndia model)
+Seen as welfare org, tax benefit	+Equal voting rights to all members, interests protected (one share/ one vote)	+Can have 50 members
–High state involvement	+Allows multistate operations	+Allows multistate operations
– oes not allow multi state operations	–Only producers are members, difficult to get equity capital	–Minimum capital required
MACS have min. state involvement accepted in only in AP state	–Large formalities, professional mgmt req., taxed	–Large formalities, reporting req. professional mgmt req., taxed

Background - PC

- To organize farmers / producers to enable them to have better bargaining power.
- Amendment of Indian Company Act in 2002-03 provided for formation of Producers' Companies (PCs)
- Prof Y.K. Alagh headed the committee that formulated the Producer Company legislation in 2002.

Restrictive clauses in the Coop. Legislation

- Power of the Registrar/Government to give directives
- Power to nominate Directors and veto powers to the nominated Directors.
- Power to annul or rescind Board resolutions.
- Supersession and suspension of the Board

Key positive features of Producer Company Legislation

- Democratic functioning : one-person-one-vote principle
- Private institution of members focused on business
- Patronage based structure
- Membership – Individuals or Producer institutions or both
- Ownership and membership - only by 'Primary Producers' and/or 'Producer Institutions'
- Equity shall not be publicly traded - it may be only transferred -
  - intention – to guard against takeover by other companies or by MNCs.
- Dividend – limited
- Profit distribution – based on volumes

Producers' Company - Formation

- Under Indian Companies Act, 1956 (section 581C)
- Who can form?
  - any ten or more individuals, each of them being a producer.
  - any two or more producer institutions.
  - or a combination of ten or more individuals and producer institutions, can get a producer company incorporated
- One or more of the eleven items specified in the Act (section 581B),
  - Production, harvesting, procurement, grading, pooling, handling, marketing, selling, export of primary produce of members.
  - Processing
  - Manufacture, sale/ supply of machinery, equipment to its members;
  - Rendering technical service, consultancy service, training research and development and all other activities of promotion of the interests of its members.

Producers' Company - Formation

- At least five and not more than 15 directors
- Role –
  - Setting Objectives -long term and annual objectives,
  - Corporate strategies and financial plans
  - Dividend payable
  - Quantum of withheld price
  - Recommend patronage to be approved at AGM
  - Admission of new members,

Producers' Company - Governance

- At least five and not more than 15 directors
- Role –
  - Setting Objectives -long term and annual objectives,
  - Corporate strategies and financial plans
  - Dividend payable
  - Quantum of withheld price
  - Recommend patronage to be approved at AGM
  - Admission of new members,

Producers' Company - Governance

- Board meetings – at least once in a quarter
- Rotational - 1 to 5 years term
- Scope for continuation if eligible
- Co-option of expert Directors (not exceeding one fifth of the total number of directors) – non voting Director
- Expert Directors- Eligible for Chairmanship
- **Chief Executive -** to be appointed by the Board from amongst persons other than Members
- Incentives – sitting fee and allowances.
- Internal audit of accounts by chartered accountants

Loans and Advances

- The members of the PCs are primary producers- may need financial assistance.
- A special provision has been made in the Act of *Producer Company* of giving loans to its members.
- The Company can provide financial assistance to its members through:
  - 1) Credit facility, to any member, in connection with the business of the Company, for a period not exceeding six months.
  - 2) Loans and advances, against security specified in articles to any Member, repayable within a period exceeding three months but not exceeding seven years from the date of disbursement (section 581ZK).

Different institutions across India promote producer organizations

- **NGOs**
  - **NGOs like PRADAN , Dhan Foundation, BAIF etc.**
  - **Aid from government, NABARD, multilateral bodies (RBS, UNDP etc)**
  - **MASUTA, VAPCOL, Morarka, etc**
- **Private Corporates with assured buy back arrangements**
  - **BILT promoted PACL and assured buy back from them**
  - **FabIndia has promoted 17 "Community owned companies" to procure its material**
  - **TATA Chemicals has promoted 5 producer companies to procure material for its subsidiary KHETSE not as CSR**
  - **ITC CSR has formed producer companies for Mentha and Agarbatti**
- **Government program**
  - **MP DPIP has promoted 17 producer companies under SGSY & World Bank sponsored program**
  - **SGSY support provided to poultry cooperatives in Jharkhand**
- **IL&FS**
  - **IL&FS has formed several producer groups and along with their capacity building initiatives**

Best Practices

- Size of the FPO – 500 to 2000 members
- Multi-commodity is better (Agriculture, Horticulture, Forestry)
- **Paying strong emphasis on marketing efforts**
- Farm-Farmer-Family – diversity of products and services for sustainability
- Ecosystem solution –convergence of multiple stakeholders (bringing together the efficiency of the market, power of the state, reach of the facilitator and strength of the communities) to ensure a sustainable eco-system for the intervention to work
- **Geo Spread – Contiguous villages 10-20 villages for one FPO**
- Spending time in identifying the leaders for the FPO
- **Financing** –
  - at farmer level directly with bankers (linkages);
  - At the FPO level through FPO financing, WH Receipt, Trade Financing (credit from supplier and advance from farmer) etc.
- **Pooling pricing** - use variable payment schedules and marketing agreements

DIFFICULTIES FACED BY POs

Financial
- Low capital base & No exit route for shareholders
- Lack of access to credit
- Bank's loan product doesn't suit to POs requirement

Skills
- Lack of awareness and capacity building due to illiteracy.
- Lack of technical skill
- Improper business planning
- Lack of professional management of the group
- Lack of ability to study the markets

Market Linkages
- Low business knowledge
- Limited linkage to market and tie-up with related agencies
- Lack of marketing infrastructure
- Lack of commercial attitude.

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- NABARD set up a Producer Organisation Development Fund with a corpus of Rs.50 crore from its surpluses in the year 2011.
- So far, NABARD has supported 91 POs of different forms by extending credit facility of Rs.205 crore and Rs.6.30 crore towards accompanying measures for capacity building/ market interventions.
- NABARD's experience shows that significant capacity building and handholding is required before the POs attain organizational, financial and commercial sustainability.
- It requires a gestation period of three years for generating meaningful benefit to the members.

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- Union Budget (2014-15): Producers Organization Development and Upliftment Corpus (PRODUCE) Fund of Rs.200 Cr. in NABARD for promotion of 2000 Farmer Producer Organizations (FPOs)
- Objective: to promote and nurture Farmer Producer Organizations(FPOs)
- Ultimate objectives are better price discovery and better income enhancement opportunities for farmers
- Rational: Aggregation is an imperative necessity for small and marginal farmers for attaining economies of scale, accessing the market and for reducing transaction cost.

NABAR Strategies for Promotion of FPOs

- Identification of natural clusters of farming groups involving POPIs
  - ✓Input centric
  - ✓Commodity / crop centric
  - ✓Technology centric
- Potential FPOs among successful WDF / Wadi Projects and their Federations
- Farmers Clubs / Federation
- SHGs and Federation
- PACs, MACs

Strategies for Promotion of FPOs continued...

- Involvement of Resource Support Agencies (RSAs)
- Close involvement of stakeholders (NGOs, Banks, Line Depts. of Govt.)
- Stakeholders meetings
- Development of best practices, success stories for replication
- Mission mode: Quantitative and qualitative milestones with timelines

Strategies for Promotion of FPOs continued

- Wide publicity - print, electronic media, mass communication strategies
- Launching of pilot projects, action research projects, experimental projects, field trials to learn and understand various successful models like MPDPIP, SERP, Mission Mangalam, etc.
- At National Level: Advisory Committee consisting of 15-20 members / experts from reputed academic institutions / NGOs / representatives of GOI, State Govt, SFAC, Corporates, Value Chain Players and Banks.
- State Level: Consultative Committee with 7-10 members consisting of NABRD, SLBC Convener, Director Agriculture, Director Horticulture, Resource Support Agency / POPI, Banks, etc.

Resource Support Agency

- Capacity building of POPIs
- Necessary training and handholding support to POPI
- Nodal POPI in places of no RSA

Role of POPIs

- NGOs, Trusts, Corporates, State Govt. Depts., NABARD subsidiaries, KVKs, Big FPCs, Farmers' Federations, Commodity Board / Federations, Cooperative Milk Unions and Other experienced institutions are eligible institutions for POPIs
- Awareness Creation among farmers about FPOs
- Organizing, enrolling and registering of FPOs
- To develop organization chart, business plans and nurture the FPOs
- Monitoring project implementation progress of FPOs

Eligibility of POPIs

- Registered under relevant Acts
- Minimum 3 yrs audited Balance Sheets/P&L accounts
- Good track record/relevant experience
- Dedicated and professionally competent staff
- Adequate infrastructure, not blacklisted by any agency
- No negative net worth, no default to any FI
- Experience in facilitating business / livelihood activities with market linkage

Activities eligible for support to POPIs and FPOs

POPI

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FPO

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S No	Eligible Activity for Support	Remarks
I	**To Producer Organisations (PO)**	
1	Salary expenses of CEO	during the first, second and third year
2	Market Facilitation & Linkage	Support in the form of common marketing infrastructure for sorting, grading, purchase of small tools for processing, packaging, certification, branding, etc
3	PO office expense	Office expenses towards small furniture, electricity, postage, etc.
	Sub-total for one PO	
II	**Support for POPIs**	
1.	Training & Exposure visits for farmers	Cost for two Training & Exposure visits for farmers
3	Training to Directors of POs	Three programmes @ one programme every year for three years.
4	Training to CEO of POs	For two programmes in two years
5	Salary of POPI Resource person	for three years.
6	Other expenses-MIS, Audit, DPR, etc.	
	Sub-total for one POPI	
	Grand Total	

SFAC EQUITY GRANT FUND (EGF)

OBJECTIVES	
	(i) Enhancing viability and sustainability of FPCs;
	(ii) Increasing credit worthiness of FPCs;
	(iii) Enhancing the shareholding of members to increase their ownership and participation in their FPC.

- EGF is grant equivalent in amount to the equity contribution of FPC shareholders.
- EGF is for FPCs, which have paid up capital not exceeding Rs. 30 lakh as on the date of application.
- The Equity Grant shall be sanctioned to eligible FPCs as follows:
  - i. Equity Grant shall be a cash infusion equivalent to the amount of shareholder equity in the FPC subject to a cap of Rs. 10 lakh per FPC.
  - ii. Equity Grant sanctioned shall be directly transferred to the bank account of the FPC.
  - iii. The FPC shall, within 45 days of the receipt of the Equity Grant, issue additional shares to its shareholder members, equivalent in value to the amount of the Grant received by it, provided that the maximum grant per category of shareholder is as follows:
    - ✓ Individual Shareholder - Rs 1000
    - ✓ Group of Individual Shareholders -Number of Members X Rs. 1,000 (Max 20,000) (e.g. SHG, Farmer Interest Group, Joint Liability Groups of Farmers)
    - ✓ Institutional Shareholders – Rs. 1, 00,000 (Farmer Producer Companies)

SFAC EQUITY GRANT FUND (EGF) ELIGIBILITY CRITERIA

1	Duly registered as FPC
2	Raised equity from its Members as laid down in its Articles of Association/ Bye laws.
3	The number of its Individual Shareholders is not lower than 50.
4	Its paid up equity does not exceed Rs.30 Lakh.
5	Minimum 33% of its shareholders are small, marginal and landless tenant farmers as defined by the Agriculture Census carried out periodically by the Ministry of Agriculture, GoI.
6	Maximum shareholding by any one member other than an institutional member is not more than 5% of total equity of the FPC.
7	Maximum shareholding of an institutional member is not more than 10% of total equity of the FPC.
8	It has a duly elected Board of Directors with a minimum of five members, with adequate representation from member farmers and minimum one woman member.
9	It has a duly constituted Management Committee responsible for the business of the FPC.
10	It has a business plan and budget for next 18 months.
11	The FPC has an Account with a "Bank" and Statement of Accounts audited by a CA for at least one full financial year.

SFAC CREDIT GRANT FUND (CGF)

OBJECTIVE

To provide a Credit Guarantee Cover to Eligible Lending Institution (ELI) to enable them to provide collateral free credit to FPCs by minimising their lending risks in respect of loans not exceeding Rs. 100 lakhs.

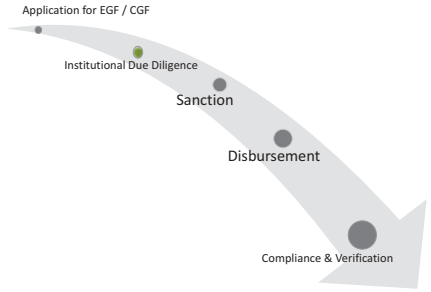
ELI

Eligible Lending Institution (ELI): means a Scheduled Commercial Bank for the time being included in the second Schedule to the Reserve Bank of India Act, 1934, and Regional Rural Banks, NCDC, NABARD and its subsidiaries, NEDFi, or any other institution (s) as may be decided by the SFAC Board or as directed by GOI from time to time ;

SFAC CREDIT GRANT FUND (CGF) ELIGIBILITY CRITERIA

1	Duly registered as FPC
2	Raised equity from its Members as laid down in its Articles of Association/ Bye laws.
3	The number of its Individual Shareholders is not lower than 500
4	Minimum 33% of its shareholders are small, marginal and landless tenant farmers
5	Maximum shareholding by any one member other than an institutional member is not more than 5% of total equity of the FPC.
6	It has a duly elected/nominated Board with a minimum of five Members (farmers and minimum one woman member).
7	It has a duly elected Management Committee.
8	It has a business plan and budget for 18 months.
9	The Bank ELI has extended / sanctioned within six months of the date of application for the Guarantee or /in principle agreed in writing / has expressed willingness in writing to sanction Term Loan/ Working Capital/ Composite Credit Facility without any collateral security or third party guarantee including personal guarantee of Board Members

EQUITY GRANT FUND (EGF) CREDIT GUARANTEE FUND(CGF)



PROJECT DEVELOPMENT FACILITY(PDF) FOR EGF AND CGF

- SFAC provides financial support to FPCs for the preparation of Equity Grant Application and Detailed Project Reports (DPR) through empanelled consultants/institutions. SFAC will cover the full cost of preparation of DPR.
- The FPC desirous of seeking assistance for preparation of Application or DPR can approach the nearest empanelled consultant or SFAC directly.
- SFAC will release cost of Application or DPR preparation directly to the empanelled consultant.

NABARD SUPPORT

ISSUES	SUPPORT
• Need timely and adequate finance ❖Limited bankability ❖Lack of tailored products	• Provide direct lending ❖Composite and Term Loan products ❖Adequate moratorium for sustainability
• Capacity Building Support ❖Lack of managerial skills ❖Need to Adopt new technology ❖Business plan development	• Aid in capacity building ❖Provide management & business plan support, classroom training, demo units, exposure visits, agri univ tie-ups, expert meetings
• Lack of market linkages ❖Tie ups with local and large companies ❖Limited marketing efforts	• Foster tie-ups with markets ❖Help in building tie-ups with local and large companies ❖Aid in creating infrastructure through schemes for storage etc.

Guiding Principles

- Activities fall within the domain of agriculture, allied sectors and Non-Farm Sector
- Producers Organization should be formed by the primary producers
- PODF will be used for providing Loan/Grant to carry out the economic activity and for capacity building and market linkages.
- The activity should result in product improvement, value addition and/ or increase in production.
- The shares of the producers cannot be sold to non-producers at any time.
- Pro-poor (improves employment, reduces poverty, improves access to credit, information)
- Community participation (ownership/ management/ empowerment)
- Integrated approach (need-based and flexible, convergence with other schemes)
- Creation of sustainable employment opportunities (direct/indirect)
- PO can carry out more than one activity depending upon requirement of members.

NABARD SUPPORT TERM LOAN / WCTL

Eligible items of Expenditure

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Rate of Interest for Loan

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ELIGIBLE INSTITUTIONS

Loan - Registered Producer Organization

Grant – Registered Producer Organization or implementing agency or both

SUPPORT TO FARMERS' CLUB/FARMERS' CLUB FEDERATION / SHG FEDERATION AND ACTIVITY BASED GROUPS

- To register as a legal entity
- Support for bulk purchasing of input and aggregation of produce and market linkages

ELIGIBLE INSTITUTIONS

PARTNERSHIP WITH CORPORATES, LINE DEPARTMENTS, NGOS, CBO

- Support to Supply Chain from Primary producer to retailer/ultimate consumer
- Support to value addition
- Encourage feeder/suppliers to retailer chains like ITC, Reliance, Heritage, Big Bazar to form/promote POs to avail assistance under PODF.
- Subsidiaries/Ancilliaries of larger entities/corporate business houses can promote POs and avail assistance under PODF

ELIGIBLE INSTITUTIONS

SUPPORT TO WATERSHED/TDF COMMITTEES

- Support to VWC in post watershed phase for livelihood, agriculture productivity enhancement and other income generation activities
- Support to cluster level WADI committee for sorting, grading, processing and packaging and marketing of horticulture produce and other income generation activities.

SCHEME FOR FINANCING FARMER PRODUCER COMPANIES

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DETAILS OF FINANCIAL ASSISTANCE

- **Eligible activities:**
- **Working Capital:** In general the FPCs need working capital for varieties of purposes depending upon the nature of business. The most observed purposes are:-
- Bulk procurement and supply of agriculture inputs.
- Procurement of seeds produced for processing or selling.
- Procurement of agriculture produces, processing and/or selling.
- **Term Loans:** The investment credit in the form of term loan is required by FPCs mostly for infrastructure development like construction of warehouse, processing plants, transportation vehicles, etc. or
- Composite loan comprising of both working capital and term loan requirements.

ELIGIBILTY CRITERIA FOR FPC

- **It is a duly registered FPC as defined in section IXA of the Indian Companies Act, 1956 (including any amendments thereto or re-enactment thereof) and incorporated with the Registrar of Companies (RoC).**
- **raised equity from its Members as laid down in its Articles of Association/ Bye laws.**
- **The number of its individual shareholders shall not be lower than 50**
- **Its paid up equity does not exceed Rs 30 Lakhs.**
- **Minimum 33% of its shareholders are small, marginal and landless tenant farmers**
- **Maximum shareholding by any one member other than an Institutional member is not more than 5% of total equity of the FPC.**
- **Maximum shareholding of an institutional member is not more than 10% of the total equity of the FPC.**
- **It has a duly elected Board with a minimum of five Members and having adequate representation from farmers and minimum one woman member.**
- **It has a duly elected Management Committee responsible for the business of the FPC.**
- **It has a business plan and budget for at least the next 18 months.**
- **The FPC has an Account with a"Bank"**
- **It has a statement of Accounts audited by a Chartered Accountant (CA) for at least one full financial year.**

ELIGIBLE INSTITUTIONS

Guarantee cover:

- All FPCs requesting for loan assistance will have to meet SFAC's CGF Scheme Criteria.
- NABARD will extend credit up to a maximum limit of one crore so that it becomes eligible up to the maximum guarantee cover specified under the Scheme.
- Maximum guarantee cover is restricted to the extent of 85% of the eligible sanctioned credit facility, or Rs. 85 Lakh, whichever is lower.
- **Processing and Guarantee Fees:**
- NABARD will not charge Processing Fees on the loan amount.
- All fees payable to SFAC for the Guarantee Cover - a onetime Guarantee Fee calculated @ 0.85% and Annual Service Fee of 0.25% will be charged to the Producer Company.
- **Security :** The financial assistance by way of loan will be secured by hypothecation/ mortgage of assets if any created out of NABARD assistance (both loan and grant)
- The interest rate fixed as of now is from 9.75% to 11.75%.

NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT

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Best practices in - General

Internal Systems

Need to have strong internal systems in place

- Setting up handling procedures for produce – grading and storage, quality control, humidity, procedure for minimizing losses and pilferage, etc.
- Formation of committees – purchase committee, sales committee, Finance Committee
- Procuring of trading infrastructure – weighing scales, tarpaulins, cleaning equipment, etc.
- MIS system for supply chain management.
- Accounting systems – internal control, cash management, working capital management.
- Inventory management – closing stock, quantity, quality, prices
- Risk Management systems – Insurance, Cash Handling procedures, transit insurance, stock insurance, etc.

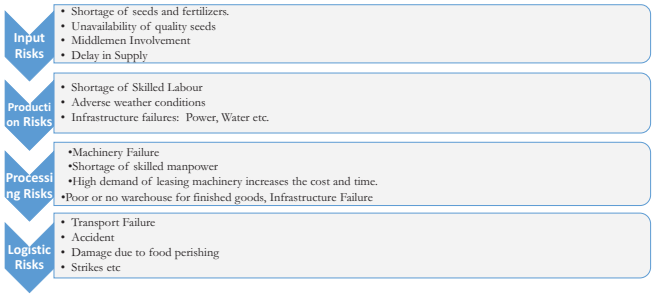
Financial Management

- Ensuring required capital and general financial management is a pre-requisite for running the business successfully.
- This is required for
  - Arranging initial capital for the company;
  - Organising working capital for stock / inventory;
  - Arranging finance for investment in infrastructure;
  - Fixing margin for input and output selling;
  - Distribution of margin / profit amongst stakeholders;

RISK MANAGEMENT SYSTEMS

- Strengthen risk management systems
  - Identification of risks
  - In both external and internal environment of the organization (Systematic issues , Human lapses, misuse and frauds),
    - Market risk,
    - Environmental risk,
    - Political risk etc.
- To identify the areas and act on mitigating risks
  - Design,
  - Develop,
  - Strengthen systems

Some examples of risks



Compliances for Farmer's Groups Registered under Producer Companies Act

Internal

The FPO's promoted under the guidance of SFAC will have following compliances.

- **Election:**
- The group will ensure that the Board of Directors is elected before the expiry of the term of the existing directors. These elections need to be in accordance with the by-laws.

- **Meetings:**
- The general body needs to meet at least once a year and the board of directors at least once in three months. AGM has to be held within 6 months of the completion of financial year. The by-laws of the society may prescribe a higher frequency of meetings. The AGM minutes have to be circulated to all attendants within 30 days of the meeting.

- **Statutory Records:**

Some of the important books of account that the Act requires of all producer companies are:

- Cash book
- Accounts of assets and liabilities
- Accounts of all purchases and sales of goods
- Updated register of members
- Copies of audit reports and special audits
- Copy of the law
- Updated bylaws with all amendments
- Minutes Book
- Bye laws book

- **Internal Audit:**
- A producer company may get its accounts audited internally twice a year
- Internal Audit has become an important management tool for following reasons:
  - It ensures compliances of Companies (Auditor's Report) Order, 2003.
  - Internal auditing is a specialized service to look into the standards of efficiency of business operation.
  - Internal auditing can evaluate various problems independently in terms of overall management control and suggest improvement.
  - Internal audit is an integral part of "Management by System".
  - Internal audit ensures the adequacy, reliability and accuracy of financial and operational data by conducting appraisal and review from the independent angel

Financial Reporting

- **Submission of Returns**

A Producer company needs to submit the following returns within 30 days of conduct of the annual general body meeting:

- Annual report of activities
- Annual audited statements of accounts with auditor's report
- List of members at the close of the year under reporting with services provided to each member
- Statement on the disposal of surplus or on the allocation of deficit
- List of names of directors, their addresses and their terms of office and
- Compliance reports relating to audit, special audit and inquiry, if any.

External Compliances:

- **Registration of the organization:**
- The Act deals with number of members required for incorporation of a producer company after complying with the requirements and provisions of the act in respect of registration.
- The producer institution needs to follow the following compliances to register under producer company Act:

Form No.	Brief Description
Form-1–A	1. A fee of Rs. 500 will be also sent .the applicant shall give four alternative names. The name of the promoters should also be the subscribers to the memorandum. The last words of the company should be ".....producer company limited" 2. The registrar's confirmation of availability of name will be valid for six months and if a company with that name is not registered within six months, a fresh application will have to be made to the registrar with fees of Rs. 500

Registration compliances:

The producer company need to submit following document for

Document required	Form No.	Brief Description	No of copies
Memorandum of association	-	Memorandum of association duly signed by the subscribers and witnessed	2 copies
Articles of association	-	Articles of association duly signed by the subscribers and witnessed	2 copies
Declaration	-	Declaration need to be made by an advocat or a charted accountant or the director as per the MOU that all the requirements of the act and the rules there under have been complied with in respect of registration	1 copies
Declaration of director	Form-29	List of persons named in the MOA as first directors and their consents	1 copies
Particulars of director	Form -32	duplicate giving particulars of the said persons named as directors	1 copies
Address of register office	Form -18	situation of registered office	1 copies
Deposit of incorporation fee	-	The receipt of incorporation of fee deposit	1 copies

Preparing to seek credit

Documentation to be in place

- Brief profile of the PC and resumes of the key Director/CEO
  - Background, Company and Business overview, Shareholder profiles, Infrastructure, Geography, Demography, Agriculture and Irrigation, Existing Organogram, Roles and Responsibilities of management
- Copies of leases, if any
- Letters of reference
- Contracts/work order/MoU for selling produces etc.
- Legal documents (registration, business license, etc.)
- Details on existing institutional mechanism – including promoter organization
- Past Sources of Funds

Plans and Studies

- Business Plan (Evolving – If possible SWOT should be carried out)
- Value Chain Study
- Market Study for
  - Existing Products and Services
  - Future Products and Services

Preparing to seek credit

- Financial Documents
  - *Cash flow statement (past and projections)*
  - *Income statement (past and projections)*
  - *Balance sheet (past and projections)*
- Break-even analysis
- Debt-service ratio

Governance Best Practices

What is Governance in FPOs?

- Governance relates to consistent management, cohesive policies, guidance, processes and decision-rights for a given area of responsibility
- FPOs are created to perform and function as a Business and have responsibility to ensure economic benefits to its members.

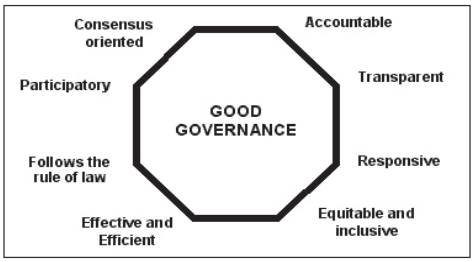
Why do we need Good Governance ?

- For increased efficiency – so that we can maximise the benefits we provide to members with limited resources
- For effectiveness – so that our work actually benefits those who are not adequately served by the state and the market institutions
- For ethical behaviour, so that we can influence actors in state and market institutions as well to behave ethically

What comes to your mind when you think of good governance and successful farmer groups ????

- Membership base and member ownership
- Organizational structure, constitution and legal recognition
- Management systems, regularity of statutory meetings
- Responsible and responsive leadership, accountable to members
- Internal knowledge and skills, professionalism of the organization
- Culture, values and integrity
- Open communication and internal trust
- Financial management and accountability
- Financial autonomy, independence from external financial support
- Political independence, no Government interference
- Relations with other stakeholders
- Quality of service provision to members

Elements of good governance



Why do we need Good Governance in FPOs

- POs are accountable to their communities
  - POs have to be committed to the highest level of accountability especially to its members
- For a PO, being accountable means
  - Demonstrating regularly to members that it uses its resources wisely and
  - Ensuring inclusive and equitable support to all members
  - The Board/Managements does not take advantage because of their special status and decision making powers.
- An accountable PO has to be
  - Transparent and ethical in all transactions with its stake holders
  - Prepared for public scrutiny of its accounts and records by funders, beneficiaries, and others.

- **Main reasons POs run into difficulties or collapse**:
  - **Poor governance** and the breakdown of trust between members, leaders, and managers.
- Managing a group of producers with **different priorities is a difficult task**, especially when POs become larger

How will Good Governance happen in POs?

- In almost all POs governance is by a two-level structure.
- First level is made up of all the PO's members also known as the General Body. All major decisions are made at the General Body meeting – either an Annual General Body Meeting (AGM)or Special meetings called for.
- Second level is made up of the leaders elected at the AGM.
  - These leaders or 'directors' form a management group, which is often called the board of directors.
- Role for the Board of Directors should be clear
- Role of Management of the company and the Chief Executive
- Having transparent and efficient systems and procedures and MIS
- Decision making is done by a committee of representatives of the Board and Management.
- Diligent and efficient staff to carry out the directions of the decision making authority.

Who should be on the Board?

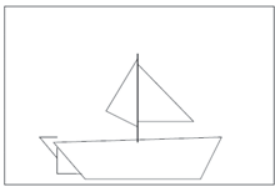
- Elected representatives from the members
- The "ideal" Board size is between seven to eleven
- Ideally the Board Members should have an inclusive composition including with representation from women
- The "ideal" tenure for a Board member is six to eight years, split into two terms of 3-4 years each.
- Members should have different specialisations – including not directly the subject matter of the PO.
- External Experts can be inducted to the Board – but they have no voting rights
- New Board members must be systematically identified and one or two inducted every year.
- New Board members must be given an orientation to the PO's mission, strategy, operations and history.
- Boards should annually appraise their own contribution to the PO.

A Good PO should have the following characteristics

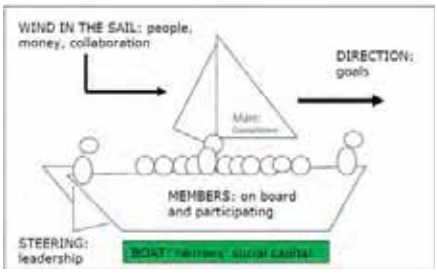
- A well developed vision and mission - goals and objectives
- Goal-oriented constitution that is understood by all members
- A vision of running the PO on clear business parameters – making a it a good business for the members as well as the PO itself
- Clear definition of responsibilities, both for leaders and members
- Elections of group officials as per constitution
- Democratic and transparent leadership
- Set rules and procedures to control decision making
- Strategic planning
- Open two-way communication and feedback mechanisms
- Regular meetings
- Proper record keeping and accountability procedures
- Effective conflict management procedures and capacities

Basic functioning and dynamics of a PO

A producers' organization is like a boat…



- The boat symbolizes the social capital of the organization, members have put some money together to undertake collective action (going by boat instead of swimming alone).
- Members are the passengers in the boat. The boat allows them to arrive together at destination instead of swimming alone
- Elected leaders steer the boat.
- The mast of the sails symbolizes the constitution, as the backbone of the organization.
- The sails are put up and positioned to go in the direction defined by the members and the leaders.
- Three types of resources determine the power of the wind and the speed of the boat: human resources, financial resources and collaboration with other stakeholders.



Ask yourself 'Boat' questions !!

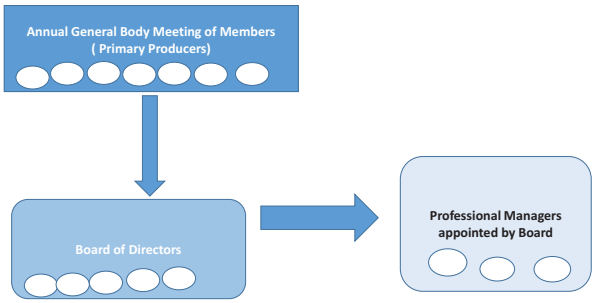
- Are the farmers' organizations in your areas really the boat that brings farmers to their destination ?
- Who put up the sail and steer the boat ?
- Is there a favourable wind for sailing the boat in your area?
- Did you encounter cases where parts of the boat are lacking? What happened?

Producer Organization Governance Structure

- Board appoints full-time managers, as employees of the PO,
  - Manage the business and report back to the board on a regular basis.
  - Number of professional staff would depend on the volume of business, diversity of activities and geographical spread of the business operation.
- Main reasons why POs hire professional managers :

1. Difficult for elected leaders to govern the PO, manage the business, and have time to manage their own private production.
2. Insufficient business and management skills and experience to manage the business effectively.
3. Cutting down on bureaucracy - Managing a business in a dynamic market requires quick decisions and a rapid response to changing conditions and new opportunities in the market.
   - Professional managers with delegated independence can often manage the business more effectively

Producer Organization Governance Structure



Good Governance in POs: Role of the Board

- The PO Board is the body for its governance
- It must lay down the value framework and the vision of the PO
- The Board must articulate / re-validate the mission every 4-5 years (Mission Validation)
- The Board must ensure compliance with the mission in every review (Mission Compliance)
- The Board should lay down policy and work only through the CEO and not be involved in operations
- The Board must hold itself ultimately accountable

Some Good Governance Practices in POs

- The Board must meet at least once every 3-4 months, on dates pre-specified well in advance.
- Attendance should be at least two-thirds of members
- A member who is absent, even with leave, for three consecutive meetings should step down
- The Board should seek detailed staff presentations / interaction at least once every alternate meeting
- The Board must meet part of the time in each meeting without the staff, and the CEO if needed
- The Board members should set some of the agenda

Professional staff and their relation with PO leadership and members

- Farmers as employers; delegation of executive tasks from farmers to staff members
- Separation of roles and functions between farmer leaders and personnel
- Redesign of organization chart and internal regulations and procedures

Main areas of responsibility of most Chief Executive Officer / Management

- Hiring, firing, and supervising the staff.
- Managing and evaluating programs and operations.
- Identifying, acquiring, and managing resources.
- Preparing an annual budget.
- Proposing policies and strategic initiatives to the board.
- Communicating with stakeholders.
- Promoting the organization in the community.
- Supporting the board in its work.

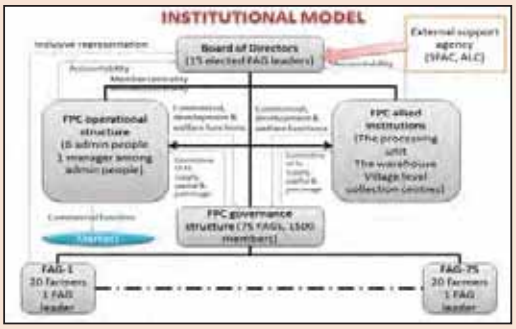
Consequences for organisation chart and internal regulations and procedures

FPOs : Intermediaries between farmers and other stakeholders

- A Producer Organisation **brings together people and businesses into a collaborative venture**. For many, working with other producers will be a new and often alien way of working.
- It involves **aligned thinking, commitment to work with others and a joint approach** to business.
- **If a farmer is not prepared to collaborate** and operate in this way, a **Producer Organisation is not for them.**

On behalf of its members, it organizes and regulates relations between members and other stakeholders in rural sectors and areas

Farmer Producer Company-Institutional Model



Social Capital of FPCs

- FPC-1
  - FPC Staff- 3
- Board Members-15
- RGB-150
- FAGs-75
  - Promoters-15
- Farmers-1500

FPC Planning

- **Baseline**
  - Covering 300 producers
  - Stakeholders
- **FPC**
  - Business model
  - Business Plan
- **FAG**
  - Production planning

Across Chain Services

Input Services	Process	Output Services	Outcome Management	Results
Physical Resources	Farm Processes	Post Harvest Processes	Employment Generation	Increased Food Security
Social Resources	Form Change	Post Production	Enterprise Promotion	Increased Incomes
Technological Resources	Place Change	Storage	Equitable Distribution	Increased Productivity
Finance Resource	Time Change	Grading	Economic Growth	Decreased Expenditure
Human Resource	Capacity Enhancement	Marketing		Risks Managed
Natural Resources		Branding		

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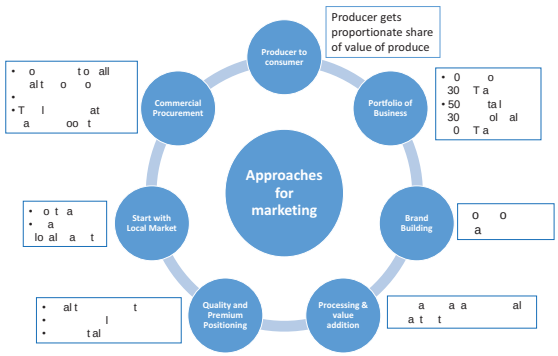

Key Approaches - Business

Integrated Service Model	• Address gaps across the value chain
Physical Infrastructure	• For procurement, processing, value addition and storage • Breakeven from year 1
Compact Area	• So as to have viable business operations of procurement, transportation, storage etc
Business Rules	• For each Business unit and for each season so as to have clarity on operations and minimise conflicts
Multi-commodities	• To address wide service needs of members, diversify risk
Producer to Consumer	• To realise fair share in the value
Start with Market	• To reduce the costs and tap local demand • To become leader in local market

Procurement	• Commercial procurement of all qualities of produce of members at their doorsteps in required time • MSP procurement
Warehousing and Trading	• Storage of agricultural produce and agri-inputs by owning a Warehouse • Trading of agricultural produce
Processing	• Processing into value added products • Marketing of processed products
Seed Production	• Production, processing and supply of quality seed by owning and managing a seed processing unit
Farmers Service Centre (FSC)	• Input services (trading of fertilizers, organic materials and seeds by having dealership) • Agricultural machinery hire centre • Technical services - technical advice, trainings, demonstration plots, FFS, learning tours etc • Financial services-savings , agricultural credit and crop insurance • ICT services-SMS based messages, smart cards etc • Resource development by local linkages (NREGS, watershed etc) • Capacity building-trainings & exposure visits • Outlet for FPC products and consumer goods

Assessment of Financials of PCs – Special Care

- Price Differential should be treated as profit
- B/S profit does not reflect return on investment
- PC – Not keen to accumulate profit => Reserves & Surplus : Creates problem
- Actual financials of PC should take into a/c
  - Book profit
  - Price Differential
  - Profit distributed at the time of lifting (at lifting price)
- Low Equity- D/E ratio can not be applied
- Return on investment is typically low
- Normal financial ratio – need to be refined to be used for assessing financial heath of PC