# Mahila Kisan Sashaktikaran Pariyojana (MKSP) under NRLM(Convergence of MKSP & MGNREGA)







## NRLM Resource Cell,

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### MAHILA KISAN SASHAKTIKARAN PARIYOJNA (MKSP)

- MKSP is a sub component of the National Rural Livelihood Mission (NRLM)
- The primary objective of the MKSP is to empower women in agriculture by strengthening community institutions of poor.
- Women farmers and leverage their strength to promote sustainable agriculture (reduction of costs and risks and increase in incomes as well)
- Specific focus on skilling and knowledge enhancement
- Launched in 2010.

#### The basic objectives of MKSP are to-

- (1) Create sustainable livelihoods institutions around agriculture and allied activities: Large sized proof-of-concepts.
- (2) Create sector-specific geography-specific sustainable package of practices and
- (3) Create a wide pool of community resource persons for scaling up Livelihood interventions in the entire country.

#### Vision for an HH under MKSP

- At least two sources of livelihood out of agriculture, livestock and NTFP strengthened
- All HHs have backyard kitchen garden for HH food and nutrition security
- Reduction in the cost of cultivation along with increase in productivity through adoption of improved practices
- An year round flow of income for the poor HH through adoption of multiple livelihood streams
- An increase in the annual income of each HH by Rs.30,000 – Rs.50,000 through a continuous engagement for 3 years

#### Vision for Villages Covered under MKSP

- Availability of pesticide free food for every HH
- Increase in animal population on account of better animal husbandry practices
- Door-step extension services delivery in every village through Aajeevika Krishak Mitras & Pashu Sakhis
- Creation of synergy among agriculture, livestock & non-timber forest produce to create sustain return for households

## Strategy for enhancing incomes of Small and marginal producers under NRLM

- Organizing the primary producers at village level.
- Creating support structure for capacity building, skilling, information sharing, credit, technology, marketing.
- Creating CRPs from within the community to take over the role of support structure.
- Promoting higher level producers' organizations.
- Network with markets and food and nutrition security interventions.

## Implementation Strategy of MKSP

#### **Focus on Poorest of Poor**

## Reducing cost of cultivation

 Promotion of agro-ecological practices - Non pesticide management, in-situ water harvesting, soil health, seed and soil management

## Increased productivity of livestock

 Better livestock management practices - Disease prevention, immunization, feed and fodder management, housing, hygiene and health management

Non Timber Forest Produce (NTFP)

• Replicate successful models in NTFP for substantial income increase – Tasar, Lac

## Community Based Extension System

- Trained village level resource persons to provide regular technical support at the household, 24x7x365
- Farmer Field School/Pashu Pathshala in the fields for reviewing, awareness generation, trouble shooting and capacity building

## Custom Hiring Centers

 Access to farm mechanization through establishment of custom hiring centers

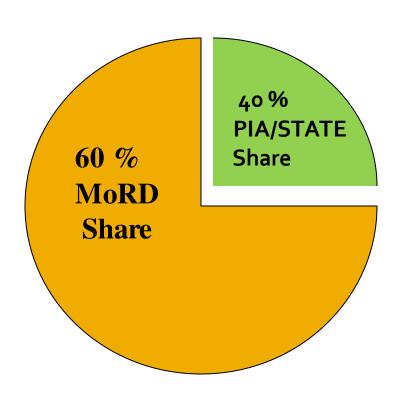
## Better price realization

 Better price realization through better post-harvest practices, value addition and market linkage through promotion of producers' enterprises

## <u>Funding Pattern</u>

- MoRD would provide funding support upto 60% to the projects submitted by State Govt., PIAs
- 90% for North Eastern Hill States
- Balance is to be contributed by respective State Gov./any other donar agencies-National & International.

## **FUNDING PATTERN**



## Types of MKSP Projects

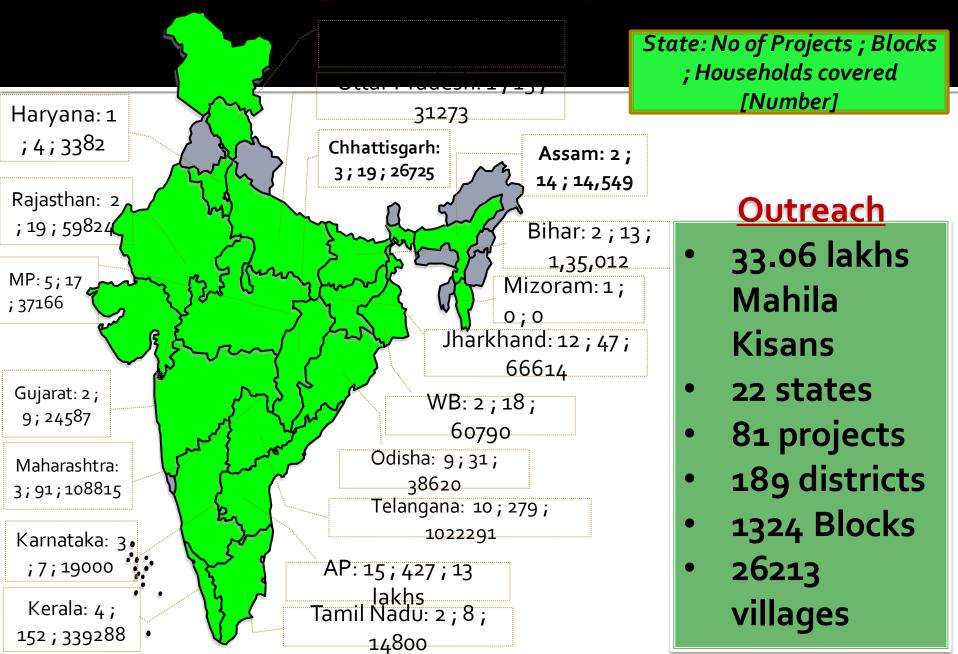
**MKSP** 

 Both NGO partners and SRLMs may be the Project Implementing Agency (PIA)

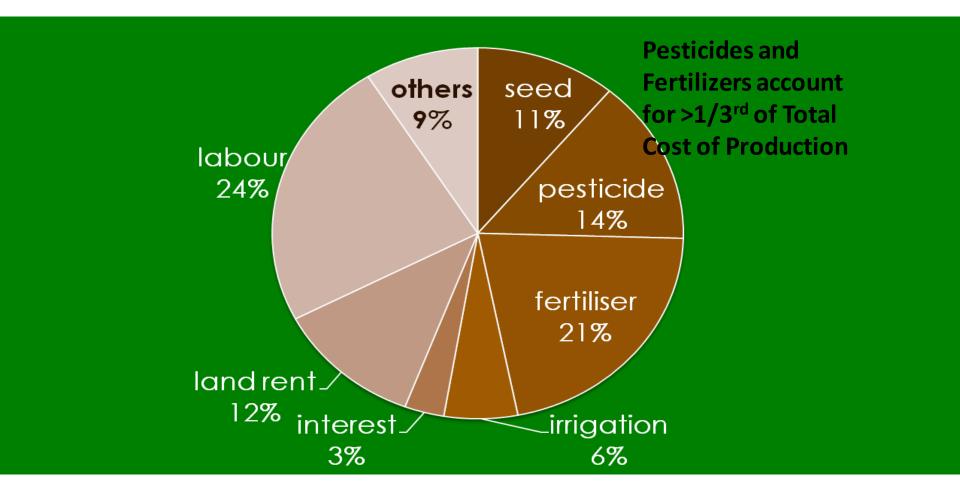
MKSP -Annual Action Plan (MKSP AAP)

 SRLMs are the Project Implementing Agency (PIA)

## MKSP: Progress till September 2017



## Cost of Production for Small & Marginal Farmers in AP



**Source**: \*NSS Report No. 497: Income, Expenditure and Productive Assets of Farmer Households, 2003

## **Agriculture Crisis**

- Increasing cost of production
- Inappropriate use of fertilizers
- Yield Almost stagnant
- Decrease in Net Income
- Depletion of groundwater

#### **MKSP Non-Negotiable-SA**

- Strong Community institutions of Women farmers
- Sustainable Agriculture
  - Low cost sustainable practices such as NPM/ IPM/ Integrated Nutrient Management
  - Mitigation of risk of exposure to hazardous farm practices
  - Soil Health improvement
  - Soil & water conservation and ground water recharging
  - Bio-diversity enhancement- poly cropping, multi-layer farming etc
  - Use of indigenous knowledge
  - Resource Management
  - Suitability of technology to the local agro-ecology
  - Resilience to climate change Integrated Natural Farming

#### MKSP Non-Negotiable-contd.

 Promoting and enhancing food and nutritional security at Household and Community level

Drudgery reduction for women farmers

 Poorest of poor focus – specific initiatives for the PoP - landless, small and marginal farmers as project participants.

#### **Expected Outcomes of MKSP (1/2)**

- Net increase in the incomes of women in agriculture on a sustainable basis
- Improvement in food and nutritional security of women in agriculture and their families
- Increase in area under cultivation, cropping intensity and food production by women
- Increased levels of skills and performance by women in agriculture
- Increased access of women in agriculture to productive land inputs, credit, technology and information

### **Expected Outcomes of MKSP (2/2)**

- Drudgery reduction for women in agriculture through use of gender friendly tools / technologies
- Increased access to market and market information for better marketing of their products
- Increased soil health and fertility to sustain agriculture based livelihoods
- Increased visibility of women in agriculture as an interest group – in terms of increased number of women institutions and increase in their entrepreneurship.

## low cost interventions under sustainable agriculture

- Soil health improvement/ management
- In situ water conservation
- Promotion of indigenous variety of seeds
- Non-chemical Pest Management (NPM)
- Inclusion of cultural practices
- Climate resilient practices

#### **Few Household Level Interventions**

- Soil Health: set of practices that could improve soil health
- Composting: (Heap composting/NADEP), Vermi composting
- Dung-based inoculants: Ghanjeevamruth
- Promotion of monocot/dicot crop combinations
- Green manure crops
- Tank silt application
- Azola in paddy field
- Summer ploughing
- Land preparation

#### **Household Level Interventions**

#### **➤ Moisture regime management (water)**

- Land and water development: land levelling, rain water harvesting, farm ponds etc
- In situ moisture conservation- Mulching, water harvesting structures etc

#### > Seed

- Seed replacement
- Seed selection, germination, priming and seed treatment using Beejamruth
- Seed storage in raised platforms

#### **Household Level Interventions**

- > Pest and disease management
- Eliminating chemical fertilizer usage
- Building of pest ecology
- Managing pests by understanding them (NPM)
- Inter crop, border crops, white/ yellow sticky plates from nursery stage
- Use of bio-pesticides such as Agnayastram, Neemastram and Brahmastram
- Sustainable agriculture/ Cultural Practice for pest management as trap cropping, bund cropping, bird perches, sticky traps etc.

#### **Household Level Interventions**

- Other interventions
- Sowing methods
- SRI/SWI/SCI
- Homestead kitchen garden
- Integration of small ruminants or backyard poultry through Pashu Sakhi Model

#### **Few Village Level Interventions**

- Custom hiring center (CHC)
- NPM shop
- Farmer field school (FFS)
- Village grain bank/ seed bank
- Producers group formation

#### Interventions

#### Non – Pesticide Management:

- A. Restoring balance between beneficial and harmful insects
- B. Agriculture without chemical pesticides to reduce cost of cultivation

#### Sustainable Soil fertility management:

- A. Treating soil as living medium
- B. Gradual reduction of chemical fertilizers with locally available resources, without compromising on yields



# Pests and Disease management

## Deep summer ploughing:



- It turns the soil and conserves rain water
- Hibernated larvae and pupae are exposed to sun light

## Community bonfires:



 In the month of june on receipt of good rain make community bonfires from 7pm to 9pm, pests emerge from hibernated pupae and attracted for bonfires and dies

### Seed and seedling treatment:



Treat the Seed and seedlings with beejamrutham

## **Border crop:**



- Maize, Jowar & Bazra may be sown as border crop, it prevents migration of pests
  It harbors friendly insects like lady bird beetles

## Trap crops:



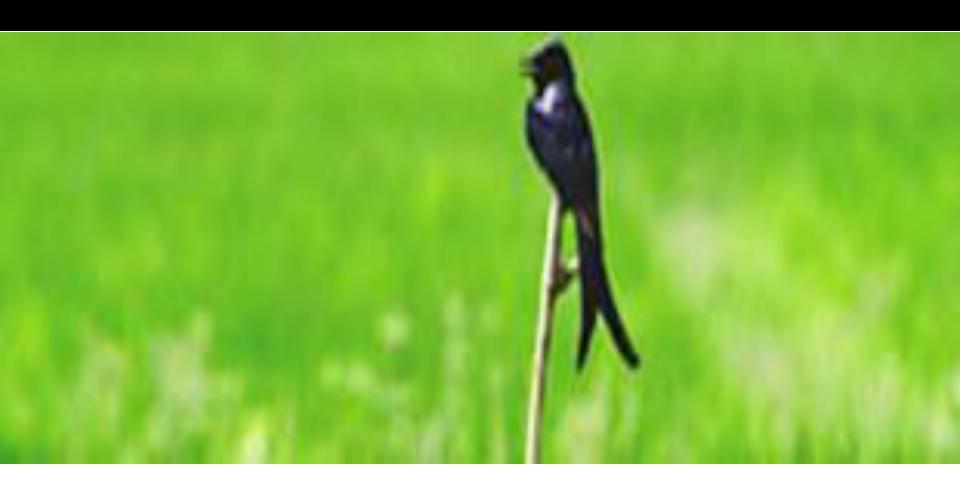
- Castor & Mari gold are used as trap crops to control prodenia and helicoverpa
- Cabbage 4 rows + muster 1 row ( Muster trap crop)

## Yellow, white sticky traps:



- It controls sucking pests like jassids, thrips, white flies
- Install sticky traps 15 20 per acre

## Bird perches:



■ Install 10 – 15 T shaped bird perches per acre

## Pheromone traps:



Use 5 – 6 traps per acre for pest monitoring

## Inter cropping:

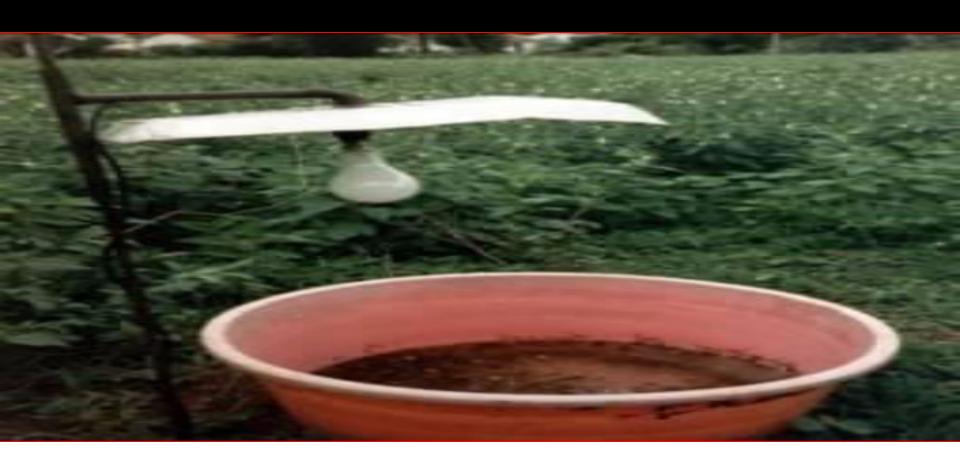
- Ground nut 5 rows + 1 row red gram
- Maize, jowar, bazra 2 rows + 1 row redgram
- Cotton 4 rows + 1 row red gram
- Gingelly, green gram, black gram 4 rows + 1 row red gram

## Clipping of leaf tips:



- Before transplantation leaves of paddy nursery may be clipped to control paddy stem borer
- Formation of alleys: It provides free aeration

## Light trap:



- All insect pests attract to light
- Light traps are used for to know the intensity of pest

# **Extracts:**

- Use appropriate botanical extracts to particular pests
- All borers use agnastram
- Big leaf eating caterpillers <u>bhramastram</u>
- Sucking pests <u>Neemastram</u> and <u>Neem</u> seed kernel extract
- For Thrips and Mites <u>Dung</u> + <u>Urine</u> + <u>Asafoeitida</u>
- For luxurious growth and to retain flower drop –
   Panchagavya
- Chillies branch tip drying Aloevera + Sithaphal + Turmeric powder

# Diseases control:-

- Paddy blast Bhail 8kg + Tulasi 2kg
- For leaf spots <u>Sour</u> butter milk
- For Downy mildew leaf spots Sont 200 grams
   + 5 lts Milk

# Soil fertility management through natural means (with out Compromising Yields)

- Soil to be treated as living media
- Returning crop residues to soil through animal route/directly
- Dung to be viewed as source of microbial inoculum
- Enabling environment for returning of earthworms

# Green manuring:



- Sow daincha, sun hemp, sesbania, green gram
- It supplies 0.8% N, 0.5% phosphorus, 0.8% K2O

# **Unique features of NADEP Compost**

- Foliage (tree leaves) is major input
- Dung requirement of 60 to 100 kg/pit of size 10'x6'x3'
- Ideally one pit per acre
- 2.4 tons of compost in 90 days
- Will supply 24 kg N, 18 kg P, 36 Kg K
- In addition supplies all micro nutrients/ plant growth promoting factors and enzymes for crop growth.

### **NADEP** compost:



- Each pit gives 2500 kgs of compost
- 1% nitrogen, 0.5 % phosphorus, 1.2 % K2O

# **Ghanajeevamrutham:**



- Apply 200 250 KGs per acre
- Enriches soil by activating soil microbes



- Apply 20 25 tractor loads of tank silt per acre
- It enriches poor soils

## Neem cake

Apply 60Kg per acre as basal and 25 Kg top dressing



### **Vermi compost:**

- Apply 1000 kgs per acre
- It supplies 1.5% nitrogen, 0.5% phosphorus, 0.5% potash, 0.005% zinc and other micro nutrients

### FYM(Farm Yard Manure)

- Apply 2 2.5 tons per acre
- Use goat & sheep penning

### **Dravajeevamrutam:**

Apply 200 lts of dravajeevamrutam per acre

## Green leaf manuring:

- Apply green leaf 2 3 tons per acre
- Use leaves of
  - Glyricidia
  - Pongamia
  - seethaphal
  - Neem leaves

#### Rain fed sustainable agriculture:

Radical soil and moisture conservation works like trenches, farm pond and conservation furrows with improved cropping pattern







## SRI intervention

#### **System of Rice Intensification (SRI):**

- To reduce ground water exploitation and to increase production
- A cost effective and resource efficient method of cultivation of Paddy.
- A low water, organic method that uses younger seedlings singly spaced and typically hand weeded with special tools

#### SRI is based on the following principles:

- a. Young seedlings between 8-12 days old (2-3 leaf stage) are transplanted to preserve potential for tillering and rooting ability
- b. Careful planting of single seedlings rather than in clumps that are often plunged in the soil
- c. Wider spacing at 25 cm x 25 cm. in square planting rather than in rows
- d. Use of cono-weeder/ rotary hoe/power weeder to aerate the soil as well as controlling weeds
- e. Alternate wetting and dry method rather than continuous flooding in the field
- f. Use of organic manure

# SRI- key practices



# **POP** strategy

- Converting "wage seekers into "net food producers"
- Providing regular income –
   Annual income Rs.50,000/-
- ½ Acre irrigated land on lease ¼ th Acre SRI and ¼ th Acre of Poly crops
- Rs.5,000 per family for taking land on lease
- CRPs were deployed to hand hold POP families



## **NPM** shops

- To supply "Green inputs"
- Provided financial support Rs.5,000 to Rs.10,000/-
- Established 2,965 NPM shops providing employment in Telengana state
- Supplying 20 green inputs at right time at affordable prices
- These shops reduced drudgery in preparation of botanical extracts

## NPM shop in a Village





# **Custom hiring centers**

- The main objective of custom hiring centers is to supply of farm implements to small and marginal farmers at nominal rates on hire
- This enables the small and marginal farmers to take up farm operations on time.
- Equipment with 1-12 HP are preferred
- Small equipment like weeders, markers, sprayers, drum seeder etc are available in custom hiring centers.
- Rs.64,000/- is provided as loan
- Established 331 custom hiring centers



# Convergence of MGGNREGA with MKSP

## **MGNREGA**

- The major objectives of Mahatma Gandhi National Rural Employment Guaranty Act (MGNREGA) are:
  - creation of durable and productive assets of which at least sixty percent should be related to Agriculture.
  - Create common work sheds for livelihood activities;
     and
  - Construct buildings for women's self help group's federations and setting up of *haats* at village and/ or block level.

## MGNREGA with NRLM

 To achieve the national target of Vermi / NADEP compost tanks/ pits under MGNREGA, the Ministry has decided to utilize the synergy of National Rural Livelihood Mission and Mahatma Gandhi NREGA programmes, by facilitating the farmers indentified under Mahila Kisan Sashaktikaran Pariyojana (MKSP) and other sustainable agriculture based interventions taken up under NRLM to create and access these assets under Mahatma Gandhi NREGA.

- There are 34 lakh farmers identified under MKSP. The majority of them are in (As of 2016)
- Andhra Pradesh (1396479),
- Telangana (1303041),
- Kerala (310535),
- Bihar (32670),
- Madhya Pradesh (35087),
- Jharkhand (26339)
- Karnataka (19000),
- Assam (12105),
- Maharashtra (5507), & Chhattisgarh (3499) etc.

# States coordination Mechanism between MGNREGA & MKSP(SRLMs/NGOs)

- Identify beneficiaries
- Map the existing job card holder families among these identified farmers
- Issuance of new job Card to the farmer who doesn't have job card among these farmers
- Generation of Demand through mobilization
- Inclusion of work and demand in AAP of the Labour Budget through special/ supplementary Gram Sabhas.

- Allocation of works to the MKSP/ NRLM farmers with job Cards in camp mode
- Training of MKSP farmers on construction of Vermi/ NADEP compost pit/ tank in such camps relating to material to be used, labour component, design, timeline, muster rolls, measurement, wage and material payment, etc.
- Facilitation in getting the work started, procurement of materials.
- Joint monitoring of the whole campaign on NREGA Soft and MIS of NRLM with requisite modification of the database and reports to help track these MKSP beneficiaries

The states are therefore requested to plan a joint campaign for construction of Vermi/ NADEP compost pits/ tanks on a priority basis as per the targets set by them. The SRLMs would ensure complete support in this endeavor especially with respect to identification and mobilization of beneficiaries, their facilitation to enable them to construct the Vermi/ NADEP compost pits/ tanks and timely payment of wages and material bills.

# Elimination of poverty is possible only through women empowerment"



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