

VIII. AGRICULTURE AND ALLIED

AGRICULTURE (Crop Husbandry)

1 Introduction

Mizoram is a small hill state. The geographical location of Mizoram lies between East longitude 92°15' to 93°29' and North Latitude 21°58' to 24°35' covering a total area of 21,087 square kilometers. More than 60 % of the total work force of the state inhabits over 782 villages spread over the mountain landscape from low hills to high mountain areas. The dominant features of hill and mountain farming in Mizoram are small land holdings, sloping marginal farmlands and cultivation under rainfed farming. Subsistent farming on these farmlands is still dominating feature.

2 Agriculture Department (Crop Husbandry)

The Department of Agriculture (CH) is committed to attain self sufficiency in food grain production and to make Agriculture a sustainable and viable vocation for livelihood support. To achieve this, the department is implementing various state and central schemes to enhance Agricultural crop production thereby improving the income level of farmers.

Agriculture occupies a very important place in the economy of Mizoram. As per Economic Classification of workers 2001 census, about 60% percent of the total workers are engaged in Agricultural and allied sector. Paddy is the principal food crop and the staple food of the Mizo. The total population of Mizoram is 10, 91,014 as per 2011 census with the total decadal growth rate of 22.78 %. In spite of the growing Rice requirement of the state which is estimated to be around 2, 00,000 MT per year, Rice production of the state is still meager. Besides Oil Palm cultivation, crop diversification programme has also largely focused on promoting the cultivation of cash crops like, sugarcane, pulses and Oil seeds that has seasonal advantage over other crops.

3 Gross Cropped Area

Out of the total geographical area of 21,08,700 ha, the gross cropped area of the state at present is 1,38,556 ha. which account for 6.57 % of the total area. Due to hilly terrain potential area for Wet Rice Cultivation (WRC) is very limited. It is estimated that there are 74,644 ha. of area having a slope of 0-25% which can be developed for WRC areas. Although marginal increased in WRC areas from 12,700 Ha to 14,940 Ha. which account for 17.64 % increase over 2011-12 is recorded, 79.98 % of the remaining potential areas still needs to be developed. Out of the gross cropped area during 2012-13, 55% the total area is under Rice cultivation, 19% under Oil Palm, 2 % under sugarcane, 6% under Oilseeds and 7 % under pulses respectively. Studies conducted through Remote sensing technology confirmed that there are altogether 2, 98,786 Ha of land under the category of 26-33% slope in Mizoram which can be developed for hill slope terrace cultivation. Therefore, a challenge remains for developing those potential areas and during 12th 5 year plan, it is targeted to bring more potential areas under Rice cultivation particularly WRC-I & II (potential plain areas) with assured irrigation to boost Rice production for the coming years.

4 Crop Production and Productivity Enhancement:

There is a significant decrease in jhum cultivation over the past few years due to the implementation of NLUP, Watershed Development Programme for Shifting Cultivation Areas (WDPSA) under Macro Management of Agriculture, diversification of Agriculture by promoting cultivation of cash crops like sugarcane,

oilseeds and promotion of Oil palm development programme both under ISOPOM and RKVY respectively. Whereas the area under Jhum cultivation was 44,947 ha. at the beginning of 11th Plan, at the end of 11th plan (2011-12), only 25,826 ha was recorded. Significant achievement has also been made during 2012-13 towards reduction of Jhum cultivation. There is 10.36 % decreased in jhum area during 2012-13 (23,150 Ha) against 25,826 ha during 2011-12.

Marginal increase in WRC Area has also been recorded from 9,446 ha. at the beginning of 11th Plan to 12,700 ha during 2011-12. Increase in WRC area during 2012-13 is recorded which account for 5.26 % increased over the preceding year (2011-12).

With the introduction of improved technology, the productivity of Rice under WRC has increased from the level of 1.5 MT/ha. at the beginning of 11th Five Year Plan to 2.0 MT/ha during 2011-12. The productivity of Rice under jhum and WRC during Kharif 2012-13 also recorded increasing trends which is attributed to the higher seed replacement rate, adoption of integrated cropping management.

5 Infrastructure Development:

a) Land Development:

With the implementation of New Land Use Policy, Rashtrya Krishi Vikas Yagona (RKVY) and Macro management of Agriculture (MMA), a total of additional 1790 ha. of WRC has already been developed till February, 2013 and more than 1000 ha of WRC had been improved and maintained.

b) Construction of Potential Area Connectivity (PAC):

During 11th 5 year plan, a total of 120 Kms of new PAC was constructed connecting potential areas of different locations and about 540 Km of existing PAC was maintained at different places. During 2012-13, new construction of PAC at different locations is proposed under RKVY covering 8 districts of Mizoram. The location verification and survey is being done at different districts and execution of works will be taken up shortly.

6: Economic Activities:

a) The implementation of National Food Security Mission- Rice (NFSM-Rice) during 2012-13 has greatly influenced the production of Agricultural crops. Distribution of improved seeds such as high yielding variety, hybrid seeds, amelioration of acidic soils and adoption of integrated crop management under this scheme is attributable to the increase in productivity of Rice. Increased in productivity of Rice under WRC is recorded at 2.2 MT/Ha during 2012-13 against 2 MT/Ha during 2011-12. The productivity of Jhum is also increased from a level of 1.03 MT/Ha during 2011-12 to 1.2 MT/Ha during 2012-13.

b) Rabi/Summer Rice cultivation is being popularized at some pockets where assured irrigation facilities are available. During 2012-13, an area of 1573 Ha is brought under Rabi/summer Rice against 450 ha during the preceding year. Increased in productivity of 2.5 MT/Ha is also recorded against 2.10 MT/Ha during 2011-12.

c) The total Area under Maize cultivation is also increased from 8000 Ha. during 2012-13 against 6905 Ha during 2011-12 which account for 15.85 % increased in area and 25.04 % increased in production over the preceding years.

d) The crop diversification programme largely focused on promoting the cultivation of cash crops like sugarcane, pulses and Oil seeds that has seasonal advantage

over other crops. Increase in area under Sugarcane cultivation, pulses and Oil seeds is also recorded during 2012-13 respectively. Increase in area under sugarcane accounted for 2.52 % over the preceding year. Similarly, there is a significant percentage increase in pulses and oilseeds both in area and production during 2012-13.

e) Significant progress is also made in Oil Palm expansion programme during 2012-13. Additional areas of 3711 have been covered under Oil Palm during 2012-13 against 1970 ha. during 2011-12 covering a total area of 13,045 Ha.

7. Farm Mechanization:

The productivity of farms depends greatly on the availability of farm power. Agricultural machines increased productivity of land and labour by meeting timeliness of farm operations and increase work out-put per unit time. To promote farm mechanization, 200 nos. of Power Tillers, 400 numbers of Mini Power Tillers, 300 numbers of power operated implements and 500 numbers of Diesel/Electrical water pump set were distributed at subsidized rate under RKVY and MMA scheme which is attributable to the increased in Farm Power availability from 0.60 KW/Ha during 2011-12 to 0.65 KW/Ha during 2012-2013.

The Department of Agriculture (CH) is implementing various state and central schemes to enhance Agricultural crop production to improve the income level of farmers and to attain self sufficiency in food grain production. The following are the names of the schemes and the major achievement made toward the scheme during 2012-13.

8: Macro management of Agriculture (MMA)

MMA was launched in 2000-01 by Government of India by integrating 27 Centrally Sponsored Schemes. The pattern of financial assistance is 100% for N.E States. The State of Mizoram has also availed this Scheme since inception. Fund allocation for our state was minimal in the initial stage but increased to a sizeable amount in the succeeding years. Fund received during last 3 years given below:

Year	Fund Received (Rs in lakhs)
2010-11	4129.25
2011-12	1617.50
2012-13	1433.00

Prioritized scheme of our State under the Scheme are production and supply of improved paddy seeds, sugarcane development, farm mechanization, National watershed Development Projects for Rain fed areas (NWDPRAs), River Valley Projects (RVP), Reclamation and Developed of Acidic Soils (RADAS) etc. A total of 140 nos. NWDPRAs projects have been taken up during XIth Plan in Mizoram which has greatly contributed to a 36% decreased in Jhum area during XIth Plan.

An achievement under farm mechanization is quite commendable. During 2011-12, 90 nos. of Power tillers, 20 nos of Diesel/electrical/petrol/kerosene driven water pump sets, 10 nos. of Tractor driven specialized equipments and power tiller driven equipments are given to the farmers. Similarly, during 2012-13, 100 nos. of power tiller, 200 nos of Diesel/ electrical/petrol/kerosene driven water pump set and 200 Nos. of Mini-power tillers are given to the needy farmers at subsidized rate. The farm power has been increased from the existing level of 0.60 KW/Ha to 0.65 KW/Ha from and contributed to the remarkable climate made by the State in Paddy production during 2011-12 and 2012-13.

However, the Scheme will be discontinued by Government of India w.e.f 2013-14 and is to be replaced by Rasthrya Khrishi Vikash Yajona (RKVY).

9: New Land Use policy(NLUP):

New land use policy (NLUP) is a Flagship programme of the Government of Mizoram. It is a comprehensive project for inclusive development focused mainly amongs others, on a major overhaul of the economy through structural changes by weaning away farmers from destructive jhum practices to sustainable livelihood opportunities based on local resources, genius of the people and keeping in view regeneration of resources.

The programme is implemented in Phase-wise and beneficiaries for each phase are allocated to the implementing Departments. Fund is released to the beneficiaries as per the approved work calendar on installment basis through their individual Bank account.

9.1: Ist Phase:

9.1.1: Physical:

The number of targeted beneficiaries under the Government's flagship programme, New Land Use Policy (NLUP) for the 1st Phase is 12340 whereas only 6024 beneficiaries opted for Agriculture activities under 1st installment. Financial assistance have been released in full as per the calendar of Works to all the beneficiaries. District wise number of beneficiaries assisted under 1st phase NLUP is given below:

Sl.No	District	WRC-I	WRC-II	Oil Palm	Sugarcane	Total
1.	Aizawl	205	464	34	85	788
2.	Lunglei	670	169	41	66	946
3.	Saiha	122	84	-	14	220
4.	Champhai	732	178	-	9	919
5.	Kolasib	170	103	83	32	388
6.	Serchhip	290	168	75	48	581
7.	Lawngtlai	1052	390	168	34	701
8.	Mamit	106	393	168	34	701
	Total	3347	1949	404	325	6025

9.1.2: Financial:

An amount of Rs.7552.00 lakh was allocated for implementation of NLUP 1st phase. Out of this, Rs. 7497.25 lakh was released till 12th February, 2013 leaving an unspent balance of Rs.54.75 lakh which will be utilized for implementation of 2nd Phase. The outlay of fund under NLUP is as given below.

Sl.No.	Particulars of fund release	Amount (Rs. In lakh)
1.	Agriculture sector	7461.45
2.	Other departments	
	1.) Horticulture	12.00
	2.) AH & Vety	8.00
	3.) Soil & WC	15.00
	Total	35.80

3.	Total fund released	7497.25
4.	Unspent balance as on 12.3.2013	54.75

9.2: Infrastructure Development:

For this, an amount of Rs.185.00 lakh was received for infrastructure development. The details of fund allocated are as given in the table below.

Sl.No	Name of Work	Estimated amount (in lakh Rupees)	Amount sanctioned (in lakh Rupees)
1.	Establishment of Quality control laboratory center at Aizawl	346.98	150.00
2.	Establishment of Agro-Seed processing Plant at Thingdawl Agri. Farm under Kolasib District	90.00	35.00
Total		436.98	185.00

9.3: IInd Phase:

9.3.1: Physical: Out of 9000 beneficiaries targeted for Agriculture sector, 755 beneficiaries have been identified till 12th February, 2013. District wise beneficiaries identified for 2nd Phase NLUP is given below:

Sl.No	District	WRC-I	WRC-II	Oil Palm	Sugarcane	Total
1.	Aizawl	171	1042	16	105	1334
2.	Lunglei	693	368	483	66	1610
3.	Saiha	87	106	-	14	207
4.	Champhai	745	427	-	37	1209
5.	Kolasib	192	115	102	12	421
6.	Serchhip	281	361	379	47	1068
7.	Lawngtlai	648	232	136	16	1032
8.	Mamit	75	386	184	30	675
Total		2892	3037	1300	327	7556

*1st installment fund of NLUP 2nd Phase is expected to be released within February, 2013.

9.3.2: Financial: An amount of Rs. 6256.00 lakh is allocated for Agriculture sector during the year 2012-2013. Detail breakup of fund allocation is given below:

Sl. No	Item of Work	Allocation of Fund (Rupees in lakh)
1.	Development component of 2 nd Phase	5670.00
2.	Development component of 2 nd Phase	586.00

10: Oil Palm Development

The rapid increase of land degradation due to jhumming, deforestation, loss of biodiversity and productivity, increasing flood are leading to an ecological crisis affecting livelihood options for Jhumia families. This suggests inter-alia policy to

encourage and support plantation of Oil Palm to overcome these constraints. Oil Palm stands as an ideal crop capable of achieving conservation of soil and moisture, repair of degraded land, provide ecological balance, food and security of rural and urban poor. The Government of Mizoram aims to implement an Action Programme with an objective of placing Oil Palm as a key component in the plan to generate employment and mitigate environmental degradation and to strengthen the process of Oil Palm Development.

In the recent past, the cultivation of Oil Palm had been tried in Assam, Tripura and Mizoram with considerable success. In Mizoram 5,000 nos. and 7,000 nos. of seedlings of Oil Palm were planted at Rotlang area of Lunglei district and Thingdawl area of Kolasib district during 1999-2000, respectively, with promising results. Thereafter, the Government of Mizoram has decided to undertake Oil Palm cultivation. The Total potential area identified in 7 (seven) Districts of Mizoram comes to 1,01,000 hectares at low elevation with gentle slope (25-33 %) having favorable Agro-climatic condition.

10.1: Adaptability of Oil Palm Cultivation in Mizoram.

The Technical Experts from NRC-OP, who studied the suitability of agro-climatic condition and water availability required for Oil Palm Cultivation in Mizoram, has recommended that “**Climate and soil condition in the southern Mizoram having low elevation and gentle slopes are quite suitable for Oil Palm cultivation**”. The growth of the existing plants which are planted during 1999-2000 exhibited vigorous growth showing good FFB production at different locations. Government of Mizoram has therefore decided to undertake large scale cultivation of Oil Palm from 2004-2005 during Xth Plan Period.

10.2: Objectives of the Oil Palm Development Programme :

- i) To create income generation opportunities for small and marginal farmers.
- ii) To reverse the degradation process and achieve eco-balance to sustain land and water use.
- iii) To motivate farmers to switch over from jhum cultivation to permanent settlement.

10.3: Present scenario of Oil Palm Development:

- i) For Oil Palm Development Programme, Ministry of Agriculture & Co-operation, Government of India, issued Administrative approval of Oil Palm Cultivation under ISOPOM (Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize) for the year 2004-2005 and the programme is implemented in Mizoram since 2004-2005 till 2011-12.
- ii) The Oil Palm Development Programme is continued under RKVY (Oil Palm Area Expansion) from 2011-12 to 2012-13. Mission on Oilseeds and Oil Palm likely to be launched from 12th Plan.
- iii) The Mizoram Oil Palm (Regulation of Production and Processing) Act, 2004 was passed in Mizoram Legislative Assembly on 2nd December, 2004. The act contains 26 sections.

iv) A high level Working Group constituted by Government of India under the Chairmanship of Dr.K.L.Chadha have identified 61,100 hectares potential area and under the Chairmanship of Dr. P.Rethinam have identified additional 40,000 hectares potential area totaling 1,01,000 Ha for Oil Palm cultivation in Mizoram.

v) The Government of Mizoram has signed M.O.U with reliable national companies for Oil Palm Development. The implementing partner companies with areas allotted to them are:-

1. Godrej Oil Palm Limited -Kolasib & Mamit District.
2. Ruchi Soya Industries Ltd. -Lunglei & Lawngtlai District.
3. 3F Oil Palm Agrotech Pvt Ltd -Serchhip & Aizawl & Saiha District

vi) Construction of one (1) primary Palm Oil processing unit is also under way at Kolasib district and another two (2) new processing unit will also be coming up shortly at different district.

vii) Numbers of Farmers involved under Oil Palm as on 12.02.2013 is 5,623 nos.

viii) Numbers of village covered under Oil Palm as on 12.02.2013 is 162 nos.

ix) Production of Fresh fruit Bunches (FFBs) as on 12.02.2013 is 1828 MT.

x) District wise area covered under Oil Palm up to February, 2012 is as given in the following Table. (Area In Ha.)

Year	Name of Districts							
	Kolasib	Mamit	Lunglei	Lawngtlai	Serchhip	Aizawl	Saiha	Total
2005 – 2006	82	-	28	-	-	-	-	110
2006 – 2007	24	-	-	-	-	-	-	24
2007 – 2008	543	267	15	-	-	-	-	825
2008 – 2009	964	476	218	-	42	-	-	1700
2009 – 2010	997	697	806	-	342	-	-	2842
2010 – 2011	489	474	500	105	310	-	-	1878
2011 – 2012	478	350	562	300	250	26	-	1966
2012-2013	1,039	928	750	617	327	50	-	3,711
TOTAL	4,616	3,192	2,879	1022	1271	76	-	13,056

xi) The District Wise Oil Palm Potential Area in Mizoram: (Area in hectare).

Sl. No.	Name of District	Geographical Area	Oil Palm potential Recommended by Chadha Committee	Additional Oil Palm Potential Area (upto 25% slope)	Total Oil Palm Potential Area	Remarks
1.	Aizawl	3,57,631	11,150	1,000	12,150	• Data interpret based on Remote Sensing and GIS Technique and Field
2.	Lunglei	4,53,800	10,000	5,000	15,000	
3.	Saiha	1,39,990	2,000	7,000	9,000	
4.	Kolasib	1,38,251	11,350	6,000	17,350	

5.	Serchhip	1,42,160	9,000	3,000	12,000	Verification. • Champhai District not included as the District fall under Temperature Sub Alpine Zone.
6.	Lawngtlai	2,55,710	7,000	10,000	17,000	
7.	Mamit	3,02,575	10,500	8,000	18,500	
		3,18,583	-	-	-	
8.	Champhai					
	TOTAL	21,08,700	61,000	40,000	1,01,000	

10.4: Expected outcome:

- i) The existing practice of Jhum Cultivation is not productive and proposed to be replace by the Oil Palm Cultivation for higher production and productivity.
- ii) Income of the farmers will be generated in considerable extent with the introduction of Oil Palm.
- iii) A part of citrus decline area which is unutilized at present could be conveniently converted into Oil Palm.
- iv) In jhum cultivation, no soil conservation measures in possible. However, with the introduction of Oil Palm necessary soil and water conservation measures could be taken up in the plantation area.
- v) A good number of educated unemployment youth will find employment in Rural Sector.
- vi) Oil Palm Cultivation will convert jhum area into permanent settlement with greater employment opportunity and higher income to farmers.

11: Rastrya Krishi Vikas Yojana (RKVY)

Concerned by the slow growth in the Agriculture and allied sectors, the National Development Council (NDC), in its meeting held on 29th May, 2007 resolved that a special Additional Central Assistance Scheme (RKVY) be launched. The NDC resolved that agricultural development strategies must be reoriented to meet the needs of farmers and called upon the Central and State governments to evolve a strategy to rejuvenate agriculture. The NDC reaffirmed its commitment to achieve 4 per cent annual growth in the agricultural sector during the 11th plan. The Resolution with respect to the Additional Central Assistance scheme reads as below:

Introduce a new Additional Central Assistance scheme to incentivise States to draw up plans for their agriculture sector more comprehensively, taking agro-climatic conditions, natural resource issues and technology into account, and integrating livestock, poultry and fisheries more fully. This will involve a new scheme for Additional Central Assistance to State Plans, administered by the Union Ministry of Agriculture over and above its existing Centrally Sponsored schemes, to supplement the State-specific strategies including special schemes for beneficiaries of land reforms. The newly created National Rainfed Area Authority will on request assist States in planning for rain fed areas.

RKVY scheme was launched in Mizoram in the year 2010-2011 and the first SLSC meeting was convened on 11.3.2011. The RKVY aims at achieving 4% annual growth in the agriculture sector by ensuring a holistic development of Agriculture

and allied sectors. This scheme is implemented focusing mainly on certain components such as to promote Farm mechanization, to establish sustainable agriculture on a large scale with a focus on Rain Fed farming areas to improve the productive efficiency of the natural resources and provide better and more livelihoods options to farmers, capacity building, to develop sustainable cropping system. The following interventions were initiated and implemented by Agriculture department (CH) under RKVY to increase crop production.

Year	2010-2011	
Sl. No	Interventions/ work components	objectives
1.	Area Expansion (Land development of WRC and Terraces)	To increase crop area and enhance Rice production
2011-12		
2.	Area Expansion (Land development of WRC and Terraces)	To increase crop area and enhance Rice production
3.	Improvement of irrigation facilities such as construction of community/individual water harvest tank, construction of Tube -Well	To bring more area under irrigated to enhance crop production.
3.	Enhancing rice yield through adoption of short duration / location specific varieties / hybrid supported by improved packages of practice of System of Rice Intensification.	To improve Rice production through improved technology and inputs.
4.	Capacity building through farmers field's school	To impart training
5.	Assistance for Agril. inputs like Fertilizers, PP chemicals, weedicides etc for improved packages of practices	To improve Rice production through improved technology and inputs.
6.	Oil Palm area expansion.	To increase oil Palm cultivation area to enhance FFB production.
2012-2013		
7.	Rice area expansion (WRC in Plain and Terraces in hill slopes)	To increase Net sown area under Rice cultivation
8.	Enhancement of Crop Production & Productivity by Improved Package of Practices (IPP)	To enhance Rice production through improved technology
9.	Farmer's field school	To impart training to the Farmers
10.	Promotion of Agriculture Mechanization	To increase Farm power availability to enhance crop production.
11.	Development of Irrigation facilities such as construction of water harvesting Tank etc	To bring more area under assured irrigation to increase crop production.
12.	Development of Rain fed Farming System in Watershed areas	To treat/developed more watershed to be

		more productive to enhance crop production.
13.	Rain fed Area Development Programme (RADP)	To make the land more productive to increase crop production.
14.	Oil Palm area expansion (OPAE)	To increase Oil Palm cultivation area.

During 2012-13, the total cost of the project approved by SLSC (State level sanctioning committee) for Agriculture department is Rs.32.40 crores. Detail budget breakups for different interventions are as given below:

Sl.No	Name of projects	Target (Rs in lakhs)	
		Physical	Financial
A	AGRICULTURE (CH)		
1	Rice Area Expansion		
	i) WRC in Plain @Rs.0.80 lakh	875	700.00
	ii) WRC in Plain @Rs.0.80 lakh in SHDC	125	100.00
	iii)Terrace in Hill Slope @ Rs.1.38 lakh	705	974.00
2.	i) Enhancement of Crop Production & Productivity by Improved Package of Practices @ Rs.7500/-	3100	232.50
	ii) Assistance For Improved cultivation on hill slope @ Rs 2000/- per ha.	4000	80.00
3	Farmers' Field School@ Rs.14,000/-	250	35.00
4	Agriculture Mechanization		
	i) Power Tiller @ Rs.45,000/-	100	45.00
	ii) Small Power Tiller @ Rs.25,000/-	200	50.00
	iii) Power Operated Implements @ Rs.15,000/-	300	45.00
	iv) Diesel/electrical driven water pump set upto 7.5 BHP/ 5KW	365	36.50
5	Development of Irrigation facilities :	120	120.00
	i) Rain Water Harvesting Tank/Ponds (15X15X1.5mtr) with a capacity of 3.3 lakhs ltr		
	ii) Pipes for carrying water from source to the field	500	75.00
6	Development of Rainfed Farming System in Watershed areas: Assistance for land development	5634 Ha	676.00
7	Administrative cost (1 % of the total project cost)		71.00
	Total		3240.00

12. National Food Security Mission-Rice (NFSM-Rice):

The National Development Council (NDC) in its 53rd meeting held on 29th May, 2007 adopted a resolution to launch a Food Security Mission comprising rice, wheat and pulses to increase the production of rice by 10 million tones and pulses by 2 million tons by the end of Eleventh Plan (2011-12). Accordingly, National Food Security Mission (NFSM) has been launched from 2007-2008 to operationalise the above mentioned resolution.

The NFSM will have three components (1) National Food Security Mission-Rice (NFSM-Rice); (2) National Food Security Mission-Wheat (NFSM-Wheat) and National

Food Security Mission-Pulses (NFSM-Pulses). NFSM has four objectives as given below:

- (a) Increasing production of Rice, Wheat and Pulses through area expansion and productivity enhancement in a sustainable manner in the identified districts of the country;
- (b) Restoring soil fertility and productivity at the individual farm level;
- (c) Creation of employment opportunities; and
- (d) Enhancing farm level economy (i.e. farm profits) to restore confidence amongst the farmers.

NFSM-Rice was launched in the year 2012-13 with an approved outlay of 604.25 lakh. The 1st instalment of fund received from Government of India as on 12.02.2013 is Rs. 379.53 lakh.

The following interventions were initiated to boost Rice production in the state during 2012-13.

Year	2012-2013	
Sl. No	Interventions/ work components	objectives
1.	To promote improved Rice cultivation through cluster demonstration on improved package of practices such as line transplanting, Hybrid Rice cultivation,	To increase crop area and enhance Rice production
2.	To encourage seed replacement by hybrid variety/high yielding variety	To increase crop area and enhance Rice production
3.	To improve plant and soil protection management through assistance for micronutrients, liming in acidic soils and plant protection chemicals and bio-agents.	To enhance Rice production through good agricultural practices in integrated manner
4.	To conduct cropping based training to expand Agriculture extension	To impart training to the farmers

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