# Guidelines for the programme of Integrated Development of 60,000 Pulses Villages in Rainfed Areas under RKVY for the Year 2011-12

#### 1. Background:

Honorable Union Finance Minister in his Budget speech this year announced an amount of Rs 300 crore under RKVY for Integrated Development of 60,000 villages of pulses crops during 2011-12. To operationalize the announcement, a set of guidelines has been prepared through appropriate interventions for effectively utilizing the allocated money in a manner that supplements the ongoing works on Pulses development under National Food Security Mission and Rashtriya Krishi Vikas Yojana as also to build institutions that provide market linkages to the pulses growers for sustainable development of the crop.

#### 2. Pulses Plan for 2011-12

- **2.1** In order to prepare the plan, a Consultative Committee was constituted in the Department in which leading pulses' growing States were included as members. In the meeting of the Consultative Committee held on 15<sup>th</sup> February, 2011 the programmatic interventions, financial outlays, modalities of implementation were finalized. Based on the discussions in the Consultative Committee the guidelines for the Integrated Development of 60,000 pulses villages in Rainfed areas (Crop grown under rainfed condition) for the year 2011-12 have been prepared as given hereunder.
- 2.2 Criteria for Selection of States: The scheme would be implemented in the States with more than 500000 hectares of pulses area. The states of M.P, U.P, Karnataka, Andhra Pradesh, Gujarat, Chattisgarh, Bihar, Maharashtra, Orissa, Rajasthan, and Tamilnadu, constituting nearly 96% of pulses area would be covered under the scheme.

- 2.3 **Preference to rainfed areas**: Pulses villages in the Rainfed areas in the selected states with no assured irrigation source would only be targeted for the implementation of the programmes prescribed under the scheme.
- 2.4The programme implementation would be watershed centric as followed during 2010-11. However, states included in the programme of 2010-11 are advised to select the villages other than the ones that were taken up last year in the same watershed areas.
- 2.5 Entitlement of each State would be dependent on the area under Pulses and the states would be given the choice to take up any or all of the three broad large components for implementation. Within this financial ceiling State would be required to prepare a technical plan for approval of their State Level Sanctioning Committee.
- 2.6 In brief, the program this year would be a bouquet of three broad categories of interventions under which a number of deliverables could be taken up as per the specific requirements in any area.
  - I. In situ moisture conservation
    - a. New Farm ponds with polythene lining and/or dug wells
    - b. Plastic lining of developed farm ponds
  - II. Accelerated Pulses Production Program with inclusion of minikits and pest surveillance
  - III. Market linked extension support- SFAC (Small Farmers' Agribusiness Consortium) framework of organizing farmers and extending end to end support.

The state wise targets and outlays for the different components are given at annexure I.

3.1 In situ moisture conservation- About Rs 180 Crores are proposed to be allocated mainly for Water conservation and Management through tanks/ ponds, drip irrigation etc. Rainfed areas with no assured irrigation source in the major pulses states should only be targeted.

#### a. New Tanks and Ponds:

- The 60,000 pulses and oil seed villages programme announced last year was implemented in rainfed areas where watershed programmes were already implemented. Under the main watershed programmes implemented by Department of Agriculture and Cooperation, Land Resources, Rural Development (MGNREGA) etc. the community tanks/ ponds have been constructed. However, there is still the problem of water allocation from the developed community water source to the individual farmers specially the poor farmers. It is therefore suggested that tanks/ ponds to benefit individual farmers may be included on the pattern of work undertaken by Maharashtra state on construction of farm ponds under Rashtriya Krishi Vikas Yojana.
- It is proposed that these tanks/ ponds could be lined by plastic sheets of 500 microns so that water is available for 2-3 life saving irrigation for pulse crop. The construction of ponds/ tanks on the field of individual farmers for the storage of rain water may be of the size 20 m x 20 m x 3 m which would cost Rs. 1.20 lakhs per tank including polythene lining (cost of lining Rs 0.40 lakh) as adopted in National Horticulture Mission( annexure 1a). The site for the construction of ponds/ tanks would be carefully selected so that earth work is minimum for construction and sufficient catchment area is available for runoff to fill the tank. The command area would be about 2 ha.

- Construction of farm ponds would be taken up in clusters of villages in a campaign mode, so that the execution of the work is expedited and close monitoring is facilitated for creating visible impact.
- It is also proposed that dug wells could also be included in the areas where ground water is available within 5 m from the ground level. The construction cost of the tank i.e. Rs 0.80 lakh would on the project cost, however, 50 % cost of lining (Rs. 0.40 lakh) would be on the project cost and remaining 50 % would be shared by the farmer.
- The fund allocated for construction of ponds/ lining of existing ponds would be credited to the bank account of the beneficiaries directly after completing the construction. The model- farm pond guidelines of Maharashtra are enclosed (appendix-A) for information and the states may adopt the same or develop similar model suitable to their local conditions.
- b. Lining of old tanks: It is proposed to line the old ponds/tanks, already constructed earlier under the various schemes of watersheds, by polythene sheets of 500 micron (cost of lining Rs 0.40 lakh) to reduce the percolation losses. However, all the tanks would not be lined in view of the need for ground water recharge. It is proposed that 50 % cost of lining would be on the project cost and remaining 50 % would be shared by the farmer. For using the stored water it is suggested that micro irrigation systems may be used for increasing the water use efficiency.
- 3.2 A3P programme supplementation- About Rs 90 Crores is proposed to be allocated for promoting better crop management practices through block demonstrations in compact blocks on the pattern of Accelerated Pulses Production Program (A3P) under National Food Security Mission. Under A3P, at present 5 major pulse crops namely gram (chickpea), urad (black gram), arhar (pigeon pea), moong (green gram) and masoor

(lentil) are included. Under the proposed programme, new units would be provided to the major pulses growing states. In addition, A3P units for other pulses such as pea, moth, and Rajmas that are also grown in sizable area are also included. In addition to the INM and IPM components of A3P, minikits and pest surveillance components will also be included out of the saving under need based chemicals component of IPM kit provided under A3P budget. The details of per hectare unit cost for different crops and cost of e-pest surveillance are given at Annexure-II (a) and II (b) respectively. The state-wise crop specific physical number of A3P units are at Annexure III

3.3 Market linked Supply Chain Development utilizing the innovative experiences of different organizations – About Rs 27 Crores: Share of Pulse growers in the consumer price of pulses is very low. This is on account of lack of market linkages due mostly to the fact that the pulses farmers are disaggregated in distribution and the quantum of produce per unit of area is very low. To work out economies of scale, it is necessary to organize the pulses farmers in to groups for getting access to the quality inputs and for market linkages. To derive advantages of developing value chains of pulses it is proposed to build farmer producer organizations (FPOs) to mitigate some of the risks and constraints faced by isolated and weak producers. Small Farmers' Agribusiness Consortium (SFAC), a Society promoted by Dept. of Agriculture, Govt. of India, can play a catalytic and nodal role in leveraging State Governments, civil society partners, financial institutions, resource persons and other stakeholders to promote Farmers Producers Organizations (FPO) in support of various Centrally Sponsored Schemes (CSS) of the Ministry of Agriculture. It is proposed that about 150 Farmers Producer Organizations (1000 farmers per FPO) would be organized by SFAC with main sets of activities i.e. (1) training, exposure and several capacity building interventions for the FPOs (2) agriculture based livelihood interventions such as trial and demonstration of Good Agriculture Practices (replacement of varieties, pre-and post-sowing practices,

seed production and dissemination, INM, IPM, etc.) and (3) formation and development of Kisan Producer Company or other institutional form, which will include awareness building, federating, drafting constitution, registration of the company, develop and establish system and procedures related to admin, accounts, HR, develop business plan and implementation, statutory compliance, etc. It is proposed to organise and enhance the capacity of FPOs in 7 states of A.P, Gujarat, Karnataka, M.P, Maharashtra, Rajasthan and U.P through SFAC. It is estimated that venture capital assistance to the tune of about Rs 35 Crores would be extended to FPOs which would leverage over Rs 300 crores of investments through investment finance. The proposal of SFAC is at **Appendix B**.

- 3.4. Monitoring. An amount of Rs 3.00 crore is proposed for the monitoring the implementation of the scheme. A Central Monitoring and Review Committee under the chairmanship of Secretary (A&C) would be constituted. Other members of the committee would include Agriculture Commissioner, DDG (Crops), IIPR, NCIPM, Joint Secretary (RKVY) and Joint Secretary (Crops) would be the convener. Option for outsourcing monitoring activities to Agencies such as NIRD, NPC, and CMIE etc. would be considered by the committee. The reports of the monitoring agency, thus selected, would be reviewed by the Central Monitoring and Review Committee at regular intervals, at least twice in a year. Technical backstopping for construction of ponds would be provided by Central Soil and Water Conservation Research and Training Institutes of ICAR. Technical backstopping for A3P would be provided by NCIPM and overall supervision would be taken up by IIPR. The Central Monitoring and Review Committee would be empowered to allocate the monitoring funds to the selected agencies based on their proposals.
- 3.5 Approval of action plans and release of funds under the scheme would be as per the Operational guidelines of RKVY.
- **3.6** A timelines for the implementation of the programme is at **annexure-IV**.

### Annexure-I

The State-wise tentative targets and allocation for different components under 60,000 village of pulses during 2011-12

(Rs.in lakhs)

Sl. No	State	Area of P	ulses	Farm Ponds					A3P		Support to	oring	G.Total
		in 000ha	% share	Old ponds lining	Cost	New Ponds with lining	cost	Total cost	No. of unit s	Total cost	SFAC	& evalua tion	
1	A.P	1984.00	9.0	1350	270.00	1350	1350.00	1620.00	12	610.00	280.00	0.00	2510.00
2	Bihar	607.00	2.7	400	80.00	400	400.00	480.00	11	538.00	0.00	0.00	1018.00
3	Chhattisgarh	908.70	4.1	600	120.00	600	600.00	720.00	8	402.00	0.00	0.00	1122.00
4	Gujarat	1000.00	4.5	700	140.00	700	700.00	840.00	9	460.00	140.00	0.00	1440.00
5	Karnataka	2369.00	10.7	1600	320.00	1600	1600.00	1920.00	16	836.00	330.00	0.00	3086.00
6	M. P	4108.10	18.6	2800	560.00	2800	2800.00	3360.00	30	1608.00	580.00	0.00	5548.00
7	Maharashtra	3828.00	17.3	2600	520.00	2600	2600.00	3120.00	27	1436.00	540.00	0.00	5096.00
8	Orissa	791.00	3.6	500	100.00	500	500.00	600.00	8	390.00	0.00	0.00	990.00
9	Rajasthan	3207.60	14.5	2200	440.00	2200	2200.00	2640.00	24	1232.00	450.00	0.00	4322.00
10	Tamil Nadu	563.50	2.6	400	80.00	400	400.00	480.00	5	252.00	0.00	0.00	732.00
11	Uttar Pradesh	2724.30	12.3	1850	370.00	1850	1850.00	2220.00	24	1236.00	380.00	0.00	3836.00
	National level	0.00	0.0	0	0.00	0	0.00	0.00	0	0.00	0.00	300.00	300.00
G.T	otal	22091.20		15000	3000.00	15000	15000.00	18000.00	174	9000.00	2700.00	300.00	30000.00

## Expenditure for INM and IPM for One ha under NFSM and A3P

Page   Page	SL.NO Item		Provision under A3P For One Ha as 100% Crops-wise cost/unit /ha in Rs. Assistance								
1 Seed Minikit @ 0.20% area/ha ( Pigeonpea, Urd Moong & 400* 440* 440* 800* 480* 440* 800* Moth @ 4Kg, Lentil & @ 8kg and Gram, Rajmash & Pea@ 16Kg/ha)  2 Gypsum 250 kg 1200 1200 1200 1200 1200 1200 1200 120			Quantity		Urd	Moong	gram	lentil	Moth	Pea	Rajmash
Moth @ 4Kg, Lentil & @ 8kg and Gram, Rajmash & Pea@ 16Kg/ha)   1200	1	2	3	4	5	6	7	8	9	10	11
Rajmash & Pea@ 16Kg/ha	1	Seed Minikit	@ 0.20% area/ha ( Pigeonpea, Urd Moong &	400*	400*	440*	800*	480*	440*	800*	1000*
2       Gypsum       250 kg       1200       1000			Moth @ 4Kg, Lentil & @ 8kg and Gram,								
3 Micro Nutrient (Zinc 25 Kg 1000 1000 1000 1000 1000 1000 1000 1			Rajmash & Pea@ 16Kg/ha)								
Sulphate, Borax, Ferrous Sulphate, Micronutrient Mixture)  4 Rhizobium culture Three packets of 200 gm each =600grm 75 75 75 75 75 75  5 PSB culture Three packets of 200 gm each= 600grm 75 75 75 75 75 75 75  6 Urea (for foliar spary) 10kg 60 60 60 60 60 60  7 Fungicide for seed Thirum 2 grm + 1grm Carbandzim/ kg for seed 200 200 200 200 200 200 200 200 treatment	2	Gypsum	250 kg	1200	1200	1200	1200	1200	1200	1200	1200
Sulphate, Micronutrient Mixture)  4 Rhizobium culture Three packets of 200 gm each =600grm 75 75 75 75 75 75 75  5 PSB culture Three packets of 200 gm each= 600grm 75 75 75 75 75 75 75 75  6 Urea (for foliar spary) 10kg 60 60 60 60 60 60 60 60  7 Fungicide for seed Thirum 2 grm + 1grm Carbandzim/ kg for seed 200 200 200 200 200 200 200 200 treatment	3	Micro Nutrient (Zinc	25 Kg	1000	1000	1000	1000	1000	1000	1000	1000
Mixture)           4         Rhizobium culture         Three packets of 200 gm each = 600grm         75		Sulphate, Borax, Ferrous									
4       Rhizobium culture       Three packets of 200 gm each =600grm       75 <td colspan="2">Sulphate, Micronutrient</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Sulphate, Micronutrient										
5         PSB culture         Three packets of 200 gm each= 600grm         75         7		Mixture)									
6 Urea (for foliar spary) 10kg 60 60 60 60 60 60 60  7 Fungicide for seed Thirum 2 grm + 1grm Carbandzim/ kg for seed 200 200 200 200 200 200 200 treatment	4	Rhizobium culture	Three packets of 200 gm each =600grm	75	75	75	75	75	75	75	75
7 Fungicide for seed Thirum 2 grm + 1grm Carbandzim/ kg for seed 200 200 200 200 200 200 200 treatment	5	PSB culture	Three packets of 200 gm each= 600grm	75	75	75	75	75	75	75	75
treatment treatment	6	Urea (for foliar spary)	10kg	60	60	60	60	60	60	60	60
	7	Fungicide for seed	Thirum 2 grm + 1grm Carbandzim/ kg for seed	200	200	200	200	200	200	200	200
8 Insecticide/Fungicides/ ,Bio- Need based chemicals, Bio agents(NPV), Bio 1450 900 860 1280 1000 860 1280		treatment	treatment								
	8	Insecticide/Fungicides/ ,Bio-	Need based chemicals, Bio agents(NPV), Bio	1450	900	860	1280	1000	860	1280	880
agents(NPV) & Bio- pesticide, fungicides and Insecticides,	agents(NPV) & Bio-		pesticide, fungicides and Insecticides,								
pesticides Pheromone traps & Lure fit in IPM		pesticides	Pheromone traps & Lure fit in IPM								
Recommendations of the crop			Recommendations of the crop								
<sup>9</sup> Weedicides 2.5 liters 740 740 740 740 740 740 740	9	Weedicides	2.5 liters	740	740	740	740	740	740	740	740
e-pest surveillance Separate programme has been prepared 200 150 150 170 170 150 170	10	e-pest surveillance	Separate programme has been prepared	200	150	150	170	170	150	170	170
G.Total 5400 4800 4800 5600 5000 4800 5600		G.Total		5400	4800	4800	5600	5000	4800	5600	5400

## Intervention specific crop-wise unit cost for e-pest surveillance under A3P Programme during 2011-12

S.No	Item	Provision under A3P For One Ha as 100% As	esistance	Crops-wise cost/unit in Rs.					
		Particulars	Cost (Rs)	Pigeonpea	Urd	Moong & Moth	Gram & Pea	Lentil & Rajmash	
	1	2	3	4	5	6	7	8	
1	Master Trainer	Cost of Training( Food, Lodging, logistic, stay and IPM Kit)	Rs. 7000/ master trainer for one week training	One master trainer per districts and total expenditure would be met from savings of NCIPM during 2010-11					
		Honorarium	Rs.2000/ month for crop specific period maximum 5  months  One master trainer per districts and total expenditure w from savings of TA cost of the district under A3P during						
		Mobility & Contingency	Rs.2000 /month for crop specific period maximum 5 months						
2	Unit Level extension Staff of State Govt.	Cost of training ( Organizing training, Refreshment and IPM Kit)	Rs.100/person/week for crop specific period for maximum 20 weeks	2000	1200	1200	1600	1600	
		Honorarium	Rs.1000/ month for crop specific period maximum 5 months	5000	3000	3000	4000	4000	
		Mobility & Contingency	Rs.1000/ month for crop specific period maximum 5 months	5000	3000	3000	4000	4000	
3	Unit level Scout farmers(10)	Cost of Training ( Organizing training, Refreshment and IPM Kit)	Rs. 100/ scout farmer/ week training for crop specific period maximum 20 weeks	20000	12000	12000	16000	16000	
		Honorarium	Rs.1000/ month for crop specific period maximum 5 months	50000	30000	30000	40000	40000	
		Mobility & Contingency  Rs.1000/ month for crop specific period maximum months (Rs. 400 for sample collection+ Rs.400 fo Mobility and Rs.200 for Photographs)		50000	30000	30000	40000	40000	
4	Pest management	Hiring charge for Spraying of insecticides	Rs.250/ha for 250 ha in a A3P unit of 1000ha area of pulses	62500	62500	62500	62500	62500	
Total			194500	141700	141700	163100	163100		
			195/-	142/-	142/-	163/-	163/-		
Cost R	ounded per ha			200/-	150/-	150/-	170/-	170/-	

### **Annexure-III**

# The State-wise tentative cost of A3P units for conducted by states under Integrated Development of 60,000 village of pulses during 2011-12

SI.No	State	Crop-wise A3P units and Total cost (Rs.in Lakh)										
		Pigeon	B.	Green	Gram	Lentil	Summer	Rajmash	Moth	Pea	Tot	G.Total
		pea	Gram	Gram			Moong				al	cost
1	A.P	3	4	3	2	0	0	0	0	0	12	610.00
2	Bihar	0	0	0	0	5	6	0	0	0	11	538.00
3	Chhattisgarh	2	3	0	0	3	0	0	0	0	8	402.00
4	Gujarat	2	2	3	2	0	0	0	0	0	9	460.00
5	Karnataka	6	6	0	4	0	0	0	0	0	16	836.00
6	M. P	2	4	0	13	6	0	0	0	5	30	1608.00
7	Maharashtra	7	4	3	10	0	0	3	0	0	27	1436.00
8	Orissa	0	2	3	0	3	0	0	0	0	8	390.00
9	Rajasthan	0	6	6	10	0	0	0	2	0	24	1232.00
10	Tamil Nadu	2	3	0	0	0	0	0	0	0	5	252.00
11	Uttar Pradesh	2	3	2	3	4	5	0	0	5	24	1236.00
Total		26	37	20	44	21	11	3	2	10	174	9000.00

## Annexure-IV

### Time Lines for the implementation of the Programme

Activities	Timelines
	(to be completed by)
Preparation and approval of the guidelines	March 4, 2011
Issue of guideline to concerned States	March 7, 2011
Preparation of action plan by States	March 25, 2011
Approval of the action Plan	March 28, 2011
Construction/Completion of 30 % of the targets of ponds.	June, 2011
Completion of remaining targets of construction of ponds and lining	November, 2010
SFAC	
-Submission of the proposal.	March 20, 2011
- Approval of the proposal.	March 25, 2011
- To launch the programme and Implementation	From April, 2011
	As per Schedule fixed by SFAC
Implementation of A3P programme.	As per Scheduled for the Implementation
	Preparation and approval of the guidelines Issue of guideline to concerned States Preparation of action plan by States Approval of the action Plan Construction/Completion of 30 % of the targets of ponds. Completion of remaining targets of construction of ponds and lining SFAC -Submission of the proposal Approval of the proposal To launch the programme and Implementation