



Guidelines for The Vegetable Initiative For Urban Clusters



Department of Agriculture and Cooperation
Ministry of Agriculture
Government of India
March, 2011

Published by:
Department of Agriculture and Cooperation (DAC),
Ministry of Agriculture, Government of India,
New Delhi, March, 2011.

The Vegetable Initiative For Urban Clusters

1. Introduction

1.1 Vegetable Initiative for Urban Clusters

Government has approved an allocation of Rs.300 crore for 2011-12 under Rashtriya Kirshi Vikas Yojana for implementation of a Vegetable Initiative to set in motion a virtuous cycle of production and income for the farmers and assured supply for consumers. To begin with, this programme will be launched near major urban centres.

1.2 Enhancing production and productivity of Horticulture

India is fortunate to be endowed with a variety of agro-climatic zones and has a tradition of growing a wide range of horticultural crops. Among the horticulture produce, vegetables have the largest share of production (60.8%). Vegetables not only contribute to the food basket of the country but are also a highly remunerative crop, providing quick returns to the farmer per unit of area. Production and productivity of crops and profitability of farmers can be enhanced by encouraging 'off-season' production under protected cultivation in green houses, shade net houses. etc for generating income round the year. Moreover, vegetables form the

most important component of a balanced diet.

1.3 Assured availability of affordable, safe and good quality vegetables

Availability of vegetables, particularly to the urban population, presents many challenges. Issues such as assured availability of safe and good quality vegetables at affordable prices continue to be a major challenge. Addressing this concern calls for concerted action on several fronts viz. production, logistics covering post harvest handling, storage, transportation, marketing, distribution and policy reform. In this background, a special initiative for the development of vegetables has been mooted with 100% central assistance under the Rashtriya Krishi Vikas Yojana.

2. Coverage and Scope

The vegetable Initiative is proposed to cover one city in each State during the year 2011-12, which is either the State capital or any other city with a population of over one million. In case, in any State there is no city which satisfies this criteria, then other urban cluster closer to one million population will be selected for the purpose.

3. Objective

Main objectives of scheme are:

- (a) Addressing all concerns related to both the demand and supply side of the vegetable sector in selected cities.
- (b) Enhancing vegetable production and productivity, improve nutritional security and income support to vegetable farmers.
- (c) Encouraging establishment of an efficient supply chain thereby leading to employment opportunities and incomes for intermediate service providers, and safe, good quality, fresh as well as processed agri produce at competitive price for urban consumers.
- (d) Promote, developing and disseminating technologies for enhancing production and productivity of vegetables in peri-urban areas of major cities.
- (e) Assisting states in addressing the entire value chain, right from the stage of pre-production to the consumers table through appropriate interventions.
- (f) Creating employment generation opportunities for skilled and unskilled persons, especially unemployed youth.

4. Strategy

To achieve above objectives, the scheme will adopt the following strategies:

- ◆ Baseline survey to assess the extant vegetable supply chain to city selected, identify bottlenecks and vegetable growing clusters, existing as well as potential.
- ◆ Organize vegetable growers into Farmers Association/Groups.
- ◆ Coordinate with public sector agencies/Municipal Corporations for making land available for cultivation, and for Farmers markets to ensure direct/transparent transaction of produce.
- ◆ Identify/select Aggregators and enable tie-up with Farmers Associations/ Groups.
- ◆ Coordinate with ICAR/SAUs to provide improved varieties of vegetable seeds/ seedlings and to introduce innovative technologies as required.
- ◆ Addressing issues in the credit supply chain with support from NABARD.
- ◆ Measures for production and productivity enhancement by adopting improved cultivars, production technologies using precision farming techniques, protected cultivation, micro irrigation etc.

- ◆ Primary processing, sorting, grading, washing, packaging and value addition clusters.
- ◆ Logistics from farm to market including Post Harvest Management, Storage and Transport infrastructure, Aggregators for suitable tie ups in the supply-chain.
- ◆ Establishment of Farmers markets including Electronic platform for transparent transactions.
- ◆ Support to urban local bodies to promote Controlled Atmosphere (CA), static/mobile kiosks etc.
- ◆ Support to institutions/farmers associations/cooperatives/private sector for seed/seedling production, vegetable cultivation, INM/IPM, organic farming, GAP, capacity building etc.

5. Procedure for Approval And Implementation

5.1 Strategy and Roadmap

States will identify the city they wish to take up in 2011-12 and develop the project for vegetable supply to the city. Perspective plan/strategic plan will be prepared based on the Baseline survey to assess the extant vegetable supply chain to the identified city, identify bottlenecks and potential vegetable growing clusters, existing as

well as potential. The project report formulated by States should invariably contain information on geography & climate, potential of vegetable development, availability of land, SWOC analysis, and strategy for development and plan of action proposed to be taken to achieve goals in the identified city of the State. The document should focus on adoption of cluster approach for production and linking with available infrastructure, or to be created, for post harvest management, processing, marketing and export. Vegetable Initiative beneficiaries would also be entitled for assistance under National Mission on Micro Irrigation and other Schemes of DAC/other Departments of Government of India so that these schemes can ensure appropriate synergy and convergence for maximum benefit in the field.

Ministry of Agriculture will communicate tentative outlay for the year by April to each State which will prepare the project on vegetable supply to the identified city through the State Horticulture Mission (SHM)/ Directorate of Horticulture/Agriculture within allocated sum. SHM will attempt to address all issues relating to vegetable development, covering

organisation of farmers group, identify/ select Aggregators and enable tie-up with Farmers Associations/Groups, production, post harvest management and marketing. Format for submission of Project Proposal to DAC is at Annexure-I.

5.2 Implementing Agency

1. Directorate of Horticulture/ Agriculture/State Horticulture Mission/State Governments
2. National Level Agencies (NLAs).

6. Role of National Level Agencies working in the areas of Horticulture / Vegetable

1. Small Farmer's Agri Business Consortium (SFAC)

Small Farmers Agribusiness Consortium will provide professional support services towards baseline surveys, organization of farmers groups in identified clusters, provision for credit with support from NABARD, assessment of technology gaps and farmers group/association tie-up with aggregators, establishment and development of PHM infrastructure.

2. National Horticulture Research & Development Foundation (NHRDF), Nasik

NHRDF will be involved for monitoring programmes relating to development

of vegetables through vegetable seed/ seedling production, demonstration and HRD and analysis of data with regard to area under production, market arrivals, farm gate, wholesale and retail prices.

7. Scheme Components and pattern of assistance

The Scheme will cover all aspects relating to formation of farmers' association/groups, training/capacity building of farmers, linking farmers group with aggregators/markets, vegetable production and supply to urban centers starting from planting material to marketing to retail level. Funds for implementation of scheme will be leveraged through RKVY. The existing cost norms and pattern of assistance for individual components under National Horticulture Mission (NHM)/ Horticulture Mission for North East and Himalayan States (HMNEH) would be guiding factors.

The scheme will be demand and need based in each segment. Technology will play an important role in different interventions. The interventions envisaged for achieving desired goals would be varied and regionally differentiated with focus on potential vegetable crops to be developed in clusters by deploying modern and hi-tech interventions and duly ensuring

backward and forward linkages. Details of the components, their estimated cost along with pattern of assistance are given in Annexure-II.

8. National Level Executive Committee

At National level, procedure adopted for technical approval and implementation will be as per guidelines of RKVY. Horticulture Division in DAC will provide the necessary technical support to RKVY Division.

For monitoring of the Scheme, a National Level Committee will be constituted under the Chairmanship of Secretary (A&C) and Joint Secretary and Mission Director(NHM) as Member Secretary with Additional Secretary(Horticulture), DDG(Hort), ICAR, Horticulture Commissioner, Joint Secretary (RKVY), Joint Secretary (Marketing), Joint Secretary (MoFPI), MD (SFAC) and MD (NHB) as Members.

At State Level, procedure adopted for sanctioning and implementation will be the same as for RKVY. At the operational level, State Governments may nominate the SHM or the Directorate of Horticulture/Agriculture for implementation of the Scheme.

State and sub-state level structures will be evolved, keeping in view the need for getting adequate returns for

vegetable produce of farmers and eliminating middlemen to the extent possible. National Dairy Development Board (NDDB) model, ITC Chaupal model and similar other models of bringing farmers in cooperative fold, for promoting vegetable cultivation, wherever feasible, will be encouraged and supported.

State level implementing agency will have the following functions:

- a) Organize Base-line survey and feasibility studies in identified cities to determine status of vegetable production, potential and demand, and tailor assistance accordingly. Similar studies would also be undertaken for other components of the programme;
- b) Prepare the Project for vegetable supply to the identified city in consonance with Scheme's goals and objectives and in close co-ordination with Municipal Corporation, Technical Support Group, SAUs and ICAR institutes and oversee its implementation;
- c) Involve National Level Agencies/ NGOs or any other agency to facilitate organization of Farmers Group/ Association for promoting vegetable cultivation in open and protected condition and linking them with

Aggregators for marketing of produce. Contract farming models can also be adopted for this purpose.

- d) Release funds to implementing organizations and oversee, monitor & review implementation of the programmes.
- e) Organize Workshops, Seminars and training programmes for all interest groups/associations at State level, with help of SAUs, ICAR Institutes, KVKs and other institutions having technical expertise.
- f) Furnish monthly, quarterly and annual progress reports to DAC.
- g) Operationalize Information Communication Technology (ICT) enabled Management Information System (MIS) up to grass root level and if need be develop and host its own web site.

9. Technology Development and Dissemination

Indian Council of Agricultural Research (ICAR) and Council of Scientific and Industrial Research (CSIR), in association with SAUs and other research institutes/organizations in the public and private sectors having capabilities in this area, will develop new technologies relating to production, protection and post harvest

management, processing and value addition and ensure its effective transfer and dissemination to the farmers.

10. Support to Cooperatives and other National Level Agencies/ Organizations involved in the scheme

Under the Scheme, provision has been made for supporting Cooperatives and other National Level Agencies/ Organizations which may be involved in organizing vegetable growers into Farmers Association/ Group and to identify/select Aggregators and enable tie-up with Farmers Associations/Groups and financial institutions. Assistance for this purpose will be provided as per cost norms given in Annexure-II.

11. Base line Survey, Evaluation & Other Studies

Under the Scheme, provision has been made for conducting Baseline survey/study to assess the extant vegetable supply chain to the identified city centres to identify bottlenecks and vegetable growing clusters, existing as well as potential. The study will be conducted by SHMs /NLA. The study will give a holistic picture of entire supply chain. Assistance for this will be provided as per the cost norms given in Annexure II.

FORMAT FOR SUBMITTING PROJECT BY STATE HORTICULTURE MISSION**Name of State:****Name of City:****Summary Indicators:**

Area, Production & Productivity (APP) (Year 2010) for supply to identified city

Sl.No.	Crop	Area (000 ha)	Production (000 t)	Productivity (t/ha)
1	Vegetable Crops			
	(a)Open condition			
	Name (i)			
	(ii)			
	(b)Protected Cultivation			
	Name(i)			
	(ii)			

Summary of Project:**Financial**

(Rupees in Lakh)

S.No.	Activity	Outlay as per action plan	Percentage of total	Remarks
1.	Base line survey			
2	Promotion of Farmers Association/groups			
3	Vegetable seed/seedling production			
4	Vegetable seed infrastructure			
5	Vegetable cultivation in Open condition			
6	Vegetable cultivation in Protected cover			
7	HRD-Training of farmers			
8	Post Harvest Management			
9	Marketing			
10	Processing Units			
	Total			

Physical: (quantifiable major outputs) for the year:

Sl. No.	Activity	Ha./ No.	Sl. No.		Ha./No.
1.	Formation of farmers group(No.)		9.	Training of farmers (No.)	
2	Vegetable seed/seedlings (ha)		10.	PHM Infrastructures (No.)	
3	Seed infrastructure(No.)		11.	New Markets (No.)	
4.	Additional coverage of area to be given crop wise (ha)		12.	New Processing units (No.)	
5.	Protected cultivation(ha)				
6.	INM/IPM (ha)				
7.	Organic farming(ha)				
8.	GAP certification				
	Total			Total	

Format for submitting Detailed Project Description

1. Background Information :

- 1.1 Geography & Climate
- 1.2 Potential of Vegetables
- 1.3 Land Availability
- 1.4 Strength, Weakness, Opportunity and Challenges (SWOC) Analysis
- 1.5 Seed/Seedling sub plan indicating requirement and availability of seed and seedlings with mechanism in place to ensure quality and accreditation

2 Project Details :

- 2.1 Objectives, Strategy & Road Map
- 2.2 Implementation Agency with contact address, phone & email ID
- 2.3 Base line survey
- 2.4 Promotion of Farmers Association/groups
- 2.5 Capacity building/training of Farmers
- 2.6 Seed/seedling production
- 2.7 Seed infrastructure
- 2.8 Area Expansion in open condition
- 2.9 Protected Cultivation
- 2.10 Promotion of INM/IPM
- 2.11 Organic Farming with certification
- 2.12 Post Harvest Infrastructure and Management
- 2.13 Marketing Infrastructure
- 2.14 Mission Management

Annexures

- I. Map of State and Cities indicating potential belt and location of existing infrastructure facilities like seed production farms, seed infrastructure, INM/IPM infrastructure, pack houses, pre-cooling units, ref. vans, cold storage units, markets, processing units etc and location of proposed infrastructure to be created.
- II. City wise area, production and productivity for major vegetable crops from 2010 onwards.
- III. City wise breakup of physical programme with identified cluster and crops.
- IV. Technical backstopping with identified institutes/agency.

COST NORMS AND PATTERN OF ASSISTANCE FOR VEGETABLE INITIATIVE

Sl. No.	Item	Maximum permissible	Pattern of Assistances
1	Seed production of Vegetables	Rs. 50,000 per ha.	100% of total cost to Public sector and for Private sector, 50% of the total cost as credit linked back ended subsidy limited to 5 ha per beneficiary. Indenting organizations for breeder seed required for producing foundation seed will be eligible for 25% assistance on the cost of procurement of breeder seed from ICAR/SAU.
2	Vegetable seedling production	Rs. 104.00 lakh /ha	100% of total cost to Public sector and for Private sector, 50% of the total cost as credit linked back ended subsidy limited to 5 ha per beneficiary. Indenting organizations for breeder seed required for producing foundation seed will be eligible for 25% assistance on the cost of procurement of breeder seed from ICAR/SAU.
3	Seed infrastructure (for handling, processing, packing, storage etc. of seeds of horticulture crops)	Rs. 200/ lakh per project	100% of cost to public sector and in case of private sector, credit linked back ended subsidy @ 50% of cost of project.
4	Vegetable cultivation		
	- Open field	Rs. 30,000/ ha.	75% of cost
	- Hybrid veg.	Rs. 45,000/- ha.	75% of cost
5	Protected Cultivation		
	(a) Green House Structure		
	I. Fan & Pad system	Rs. 1465/ Sq.m	50% of the cost limited to 4000Sq.m per beneficiary.

	II. Naturally ventilated system	Rs. 935/ Sq.m	
	(i) Tubular structure	Rs. 515/ Sq.m	50% of the cost limited to 4000 Sq.m per beneficiary.
	(ii) Wooden structure	Rs. 515/ Sq.m	50% of the cost limited to 2 units (each unit not to exceed 2000 sq.m) per beneficiary
	(iii) Bamboo structure	Rs. 375/ Sq.m	50% of the cost limited to 5 units (each unit not to exceed 800 sq.m) per beneficiary.
	c) Shade Net House		
	(i) Tubular structure	Rs. 600/ Sq.m	50% of the cost limited to 4000 sq.m per beneficiary.
	(ii) Wooden structure	Rs. 410/ Sq.m	50% of the cost limited to 2 units (each unit not to exceed 2000 sq.m) per beneficiary.
	(iii) Bamboo structure	Rs. 300/ Sq.m	50% of the cost limited to 5 units (each unit not to exceed 800 sq.m) per beneficiary.
	(c) Cost of planting material and other inputs of high value vegetables grown in green house/ poly house/shade net house	Rs 105/sq.m	50% of cost limited to 4000 sq.m per beneficiary
6	Promotion on INM/IPM	Rs. 2000/	50% of cost.
7	Organic Farming		
	(i) Adoption of organic farming.	Rs. 20,000/ha	50% of cost limited to Rs.10000/ha for a maximum area of 4 ha. per beneficiary, spread over a period of 3 years involving an assistance of Rs.4000/- in first year and Rs.3000/- each in second & third year.
	(ii) Organic Certification	Project based	Rs. 5 lakh for a cluster of 50 ha which will include Rs.1.50 lakh in first year, Rs. 1.50 lakh in second year and Rs. 2.00 lakh in third year.
	(iii) Vermicompost Units (to be renamed as organic input production)	Rs. 60,000/ unit for permanent structure and Rs. 10,000/ unit for HDPE Vermibed	50% of cost conforming to the size of the unit of 30'x8'x2.5' dimension to be administered on pro-rata basis.

8	Training of farmers within the State	Rs. 750/day per farmer excluding transport	100% of the cost.
9	Post harvest management		
	1. Pack house	Rs. 3.00 Lakh/ per unit with size of 9Mx6M	50% of the capital cost.
	2. Pre-cooling unit	Rs.15.00 lakh for 6MT capacity	Credit linked back-ended subsidy @ 40% of the cost of project in general areas and 55% in case Hilly & Scheduled areas for individual entrepreneurs.
	3. Mobile pre cooling unit	Rs. 24.00 lakh/unit for 5 MT capacity	Credit linked back-ended subsidy @ 40% of the cost of project in general areas and 55% in case Hilly & Scheduled areas for individual entrepreneurs.
	4. Cold storage units (Construction/expansion/Modernization)	Rs. 6000/MT for 5000MT capacity	Credit linked back-ended subsidy @ 40% of the capital cost of project in general areas and 55% in case of Hilly & Scheduled areas in respect of only those units which adopt new technologies and include insulation, humidity control and fin coil cooling system with provision of multi chambers.
	5. Refer vans/ containers	Rs. 24.00/unit for 6 MT capacity	Credit linked back-ended subsidy @ 40% of the capital cost of project in general areas and 55% in case of Hilly & Scheduled areas in respect of only those units which adopt new technologies and include insulation, humidity control and fin coil cooling system with provision of multi chambers.
	6.Primary / Mobile/ Minimal processing unit	Rs. 24.00 lakh/unit for 6	Credit linked back-ended subsidy @ 40% of the

		MT capacity	capital cost of project in general areas and 55% in case of Hilly & Scheduled areas in respect of only those units which adopt new technologies and include insulation, humidity control and fin coil cooling system with provision of multi chambers.
	7. Evaporative / low energy cool chamber (8 MT)	Rs.4.00 lakh/unit	50% of the total cost.
	8. Preservation unit (low cost)	Rs.2.00 lakh/unit for new unit and Rs.1.00lakh/unit for up gradation	50% of the total cost.
	9 Low cost onion storage structure (25 MT)	Rs.1.00 lakh per unit	50% of the total cost.
	10. Pusa Zero energy cool chamber (100 kg)	Rs. 4000 per unit	50% of the total cost.
10	Markets		
	1.Rural Markets/ Apni mandies/Direct markets	Rs. 20 lakh/ unit	Credit linked back -ended subsidy @ 40% of the capital cost of project in general areas and 55% in case of Hilly & Scheduled areas for individual entrepreneurs.
	2. Retail Markets/ outlets (environmentally controlled)	Rs. 10.00 lakh /unit	Credit linked back -ended subsidy @ 40% of the capital cost of project in general areas and 55% in case of Hilly & Scheduled areas for individual entrepreneurs.
	3. Collection/aggregation centre at production cluster @ Rs. 8 lakh / unit	Rs. 8 lakh	50%
	4. Static/Mobile Vending Cart/ platform with cool chamber.	Rs. 30,000/ unit	50% of total cost.
	5. Motorized vending cart	Rs. 1.00 lakh/ unit	50% of total cost.

11	<p>a) Promotion of Farmers Association/Groups of 15-20 farmers/20 ha and tie up with Financial Institution and aggregators (@Rs. 2 lakh / group/annum) (no)</p> <p>(b) Base line survey (no)</p>	<p>Rs. 2.00 lakh/ group/annum</p> <p>Rs.15 lakh/ metro, Rs.10 lakh/ city with more than 1 million population and Rs.7.5 lakh per urban cluster with less than 1 million population</p>	<p>100% in year I, 75% in year II & 50% in year III</p> <p>100 % of cost (survey related expenditure is for one time).</p>
12	<p>HRD – Training of Farmers (no) @ Rs. 1500/per farmer for 2 days</p>	<p>Rs. 1500 per farmer for 2 days</p>	<p>100%</p>

