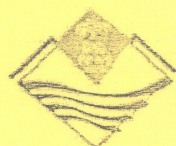


**REVISED
PILOT PROJECT**

on

Nutri - Farm

For the year 2013-14



उत्तराखण्ड शासन

Cost of Project -----Rs 345.00 lakh

Department of Agriculture,

Uttarakhand, Dehradun,

BACKGROUND

Despite spectacular increase in food grain production in recent decades the problem of chronic malnutrition continues to exist extensively, especially among children and women, because they are caught in the relentless sequence of ignorance, poverty, inadequate nutritious food intake and disease.

India has the highest number of female mortality during pregnancy and childbirth. According to the states of the World's Children Report, 410 out of 1 lakh new born babies in the country lose their mother during the delivery itself. Likewise India, women of Uttarakhand Himalaya also perform agricultural practices (primary activities) and contribute to a major share of family economy in terms of food grains, oilseeds, vegetables, fruits, milk, wool, fuel, fodder etc. In this part of Himalaya, excess workloads coupled with inadequate intake of nutritious food have led to malnutrition problem among women. In fact cooking less than required, eating low nutritive meals is one of the major concerns in this region. This practice over a longer period can result in lower nutritional levels.

The World Bank estimates that India is ranked 2nd in the world in the number of children suffering from malnutrition, after Bangladesh, where 47% of the children exhibit a degree of malnutrition. Protein-Energy Malnutrition (PEM) is the major malnutrition which occurs in children, hampers the proper mental and physical growth when protein and energy consumption does not meet the body's needs.

Marasmus and Kwashiorkor diseases in children are usually due to protein and energy deficiency. Malnutrition in women is also widespread in India and one of the determinate for this reason is poverty. Malnutrition especially iron deficiency- anemia has increased among women. The adverse influences of maternal malnutrition extend beyond maternal mortality to cause intrauterine growth retardation, child malnutrition and an increase in chronic diseases. This is also quite often that the malnutrition and iron, calcium deficiencies found in most of the female population at different stages like pregnancy, lactating females and young women.

Haridwar and Tehri Garhwal districts of Uttarakhand, come under Garhwal mandal. Out of total geographical area of state these districts cover an area of about 6440 km² (2360 of Haridwar and 4080 km² of Tehri Garhwal). Haridwar and Tehri Garhwal have different physiographic conditions as Haridwar is situated at height of 314 meters from the mean sea level (MSL), while Tehri comprises low and high peaks, plateau and valleys with wide

variation in altitude from 300 – 2250 MSL. Haridwar and Tehri Garhwal comprises 46, 316 and 75, 979 Nyay panchayat, Gram panchayats, respectively. Total numbers of inhabited villages are 627 in Haridwar and 1773 in Tehri Garhwal.

The total population of Haridwar district is 19.27 lakh out of which 11.99 lakh population lives in rural area. Tehri garhwal district is populated with 6.05 lakh people out of which 5.45 lakh live in rural area. As far as children population is concerned it is 23% and 25 % of total population for Tehri and Haridwar, respectively. Out of it malnutrition cases have been found in rural and urban children of the districts.

Table 1-Malnutrition cases found in rural areas

Name of District	Development Block	Number of malnutrition cases in children (1-6 year)*	Number of severe malnutrition cases in children (1-6 year)*
Haridwar	Narsan	3051	347
	Laksar	14208	619
	Bhadraabad	4426	690
	Bhagwanpur	20	20
	Khanpur	1333	326
	Roorkee	4080	1058
	Tehri	Narendernagar	267
	Jaiunpur	627	16
	Chamba	383	14
	Partapnagar	215	18
	Thauldhar	151	10
	Jakhanidhar	142	03
	Bhilangana	42	06
	Devprayag	48	10
	Kirtinagar	277	63

*District Programme Officer (child development) Haridwar (2013-14) and Tehri Garhwal (2012-13)

Table 2- Malnutrition cases found in urban areas

Name of urban area	Number of malnutrition cases in children (1-6 year)	Number of severe malnutrition cases in children (1-6 year)
Roorkee City	105	49
Haridwar City	1371	52
Manglour	600	207

*District Programme Officer (child development) Haridwar 2013-2014

To understand malnutrition it becomes necessary to know the basic crop and cropping pattern of the district adopted by farmers because farmers are the major supplier of the food grain.

Main theme of the Project (Nutri Farm)

It is seen that families in Uttarakhand are mostly categorized in lower income group. So, it is hard for them to purchase the nutrient rich food. The diet of poor in Uttarakhand usually consists of very high amount of staple foods such as (maize, wheat and finger millet) but few micronutrient rich foods such as fruits, vegetable and animal and fish products. Production of nutri rich variety of crop, offers a cost- effective and sustainable approach, for alleviating the problem of malnutrition in the most vulnerable section of the society i.e. women and children. Thus, there is great opportunity to fulfil the need of protein and energy requirement through production of nutri rich varieties of the crops. Keeping the view in mind, Government of India has proposed NUTRI FARM scheme for cultivation and promotion of nutri rich varieties of the crop to minimize the problem. In Uttarakhand two districts namely, Haridwar and Tehri have been selected under the scheme.

Agricultural Prospective and Major Farming Systems of District Haridwar and Tehri

The main occupation of people in Haridwar and Tehri districts is agriculture and related works like animal husbandry, fishery, Poultry farming. The main area under cultivation is sugar cane followed by wheat and paddy. The paddy wheat cropping system is widely accepted in Tehri district, while Paddy, Wheat and Sugarcane – Ratoon – Wheat are the cropping system followed in Haridwar.

District Haridwar comes under gangatic plain region which is also known as Tarai and Bhabar. However, district Tehri comes mainly under hill region. The total area under cultivation is 1.18 and 0.59 lakh ha consisting all Blocks of Haridwar and Tehri districts respectively.

The major crops which are being grown by the farmers are sugarcane (0.66 lakh ha) rice (0.19 lakh ha), wheat (0.486 lakh ha) and maize (0.016 lakh ha). The area under pulse is very low which is 0.016 lakh ha and the major pulses are urd, masoor and pea.

The major crops which are being grown by the farmers are rice (0.15 lakh ha) mandua (0.18), maize (0.025) and wheat (0.25 lakh ha). The area under pulse is very low which is (0.10 lakh ha) and the major pulses are urd, masoor and rajma.

It also shows that the monoculture farming system is being adopted by the farmers. In Mono culture farming the availability and diversity of nutritive food become low and regular consumption of same type of food and grain, year after year cause malnutrition.

Status of other agricultural foods

Rice and wheat are important staple food in Haridwar. In Tehri district other than rice and wheat, mandua is also used as staple food. The promotion of cultivation of micro-nutrient rich cultivar of these crops and development of their effective supply chain could help in reduction of malnutrition. In this context, Nutri Farms are proposed to be established for cultivation and setting up of assured supply chain of nutrient rich variety of food in districts.

Activities of the scheme

I) Cluster demonstration

494 Cluster demonstration units (1 unit = 10 hectares) of identified nutri rich crops in each district will be organized through identified SHGs in the district by state department of Agriculture. Assistance @ Rs. 5000 per hectare for maize, finger millet and wheat will be provided to the farmers in the term of critical inputs for organization of demonstration of nutri rich varieties of the identified crops. District level Programme Management Group (PMG) will be responsible for arrangement of critical inputs will be ensured by the district level State Department of Agriculture (SDA) well in advance before starting the sowing of the crop.

II) Market link support for establishment of value chain

SFAC is responsible for establishment of Farmers Producer Organization (FPO) of beneficiary farmers selected by SDA under cluster demonstration, establishment of

procurement centre and processing units. SFAC will also be responsible for tie up arrangements of supply of the procured population to targeted population under mid day meal of school education and SNP of women and child department through FCI or state procuring agencies and also for commercialisation of marketable surplus of nutri rich products. An amount of Rs. 25 lakh is to be provided to the SFAC for this purpose. SFAC will formulate the state wise detailed plan separately for development of mechanism for procuring, processing and supply of nutri rich produce.

III) Publicity of the programme

State department of agriculture would make wider publicity of programme through mass media to create awareness for cultivation and consumption of nutri rich crop varieties. Publicity material will be developed publicity material with the help of department of food and nutrition of SAUs/ICAR and women and child department. Assistance @ of Rs. 1 lakh is being provided for wider publicity of the programme.

IV) Cluster demonstration on post harvest and value addition by (SAUs)

280 Cluster demonstrations on post harvest and value addition of identified crops in each district will be organized in identified SHGs through department of food and nutrition of SAUs/ICAR. Assistance @ of Rs. 15000 per cluster demonstration for finger millet and wheat will be provided to SAUs for demonstrate the post harvest and value addition technologies organization of the demonstration will be monitored by District level Programme Management group (PMG) All critical inputs for demonstration on post harvest and value addition of nutri rich crop produce will be arranged by SAUs/ICAR. Cost norms of inputs for value added demonstration will be decided by SAUs/ICAR and approved by the PMG.

V) Implementation & Monitoring

* Rs 2.00 lakh per districts in the Work Plan are being proposed as per the guidelines of the scheme.

WORK PLAN FORMATS

1. Name of state: Uttarakhand
2. Name and Address including phone of implementing department at state level:
Department of Agriculture, Uttarakhand, Dehradun
3. Name, designation & address including phone and fax of nodal officer of the scheme: K.C.Pathak, Joint Director Agriculture (Planning), Directorate of Agriculture, Uttarakhand, Dehradun. Phone- 0135-2772676, Mob. 9412058641, Fax- 0135-2771881
4. Name address and designation including phone and fax of nodal officer of other stake holders:

S. No.	Name of Department	Name & address of Nodal officer	Phone & Fax
1.	Agriculture	Same as above in point No.3	

5. Total cost of the programme: Rs. 345.00 lakh

6. Details of the district under the programme

S. No.	Name of District	Name & address of Nodal officer	Phone & Fax
1.	Haridwar	Mr. J.P. Tiwari, Chief Agriculture Officer, Vikas Bhawan, Roshanabad, Haridwar	01334-239034 Mob. 9412309322
2.	Tehri	Mr. Gopal Singh Bhandari, Chief Agriculture Officer, Narendra Nagar, Tehri	01378-227501 Mob- 9412922856

7. State level area, production and average yield of selected crops during (2010-11 to 2012-13):

S No	Name of crop	Normal area (ha)	Average yield (q/ha)			Total production (MT)		
			2010-11	2011-12	2012-13	2010-11	2011-12	2012-13
1.	Maize	26848	15.02	14.65	Final estimation work is under progress	42481	41008	Final estimation work is under progress
2.	Finger millet	120843	13.31	13.92		170484	174269	
3.	Wheat	369209	23.15	23.79		878045	878373	

8. Cropping pattern and acreage under selected crops:

S.No.	Name of crop	Cropping pattern	Identified varieties	nutri-rich	Normal area (ha)
1.	Maize	Maize-wheat	HQPM-I, (QPM-9)	Vivek	26848
2.	Finger millet	Finger millet--wheat	PRM-I, V L 324, V L -315		120843
3.	Wheat	Rice-wheat	V L 892		369209

Nutri Farm work plan 2013-14, State - Uttarakhand

Sl.No.	COMPONENTS/ SCHEMES	Unit		Tehri		Haridwar		Total	
				Phy.	Fin. (Lakh Rs.)	Phy.	Fin. (Lakh Rs.)	Phy.	Fin. (Lakh Rs.)
1	Cluster Demonstration (1 Unit = 10 ha.)		Rs. @ Rs. 5000.00/ha						
a.	Maize	Unit		75	37.50	26	13.00	101	50.50
b.	Madua	Unit		19	9.50			19	9.50
c.	Wheat	Unit		120	60.00	254	127.00	374	187.00
	Sub total 1			214	107.00	280	140.00	494	247.00
2	Market link support for establishment of production & supply chain by SFAC		Rs. 25 lakh per district		25.00		25.00		50.00
3	Publicity of the programme		Rs. 1.00 lakh per district		1.00		1.00		2.00
4	Cluster Demonstration of Post Harvest Value Addition by food and nutrition department of ICAR/SAUs	No.	Rs.15000.00 per unit	140	21.00	140	21.00	280	42.00
5	Implementation and Monitoring		Rs 2 lakh/ district		2.00		2.00		4.00
	Grand Total				156.00		189.00		345.00

