

Nutritional Garden

KVKs: Bilaspur, Kanker, Gariyaband, Raigarh, Raipur, Ambikapur, Guna, Ashok Nagar, Gwalior, Rajgarh, Ratlam, Badwani, Ujjain, Neemuch, Shajapur

Description of technology adopted:

In Bilaspur district of CG state 18% mal nutrition is found among farm family. Farmers and Farm women were also suffering from mineral and vitamin deficiency (Iron, calcium vita c) because rural people are not having balanced diet. According to NIN 300gm Vegetable and 100 gm fruits are essential for /person/day. Kola badi is regularly in practice of farm women of CG state. KVK Bilaspur has motivated them to adopt Nutritional garden in place of kola badi to fullfil their nutritional requirement as suggested by NIN.

Facts on Nutrition in Madhya Pradesh

Children under 5 year's age:

- v 41.5% stunted 17.5% wasted, 23.1% low birth weight
- v 74.1% with anemia
- v 56% women (15-49 yrs) with anemia
- v Married before 18 yrs 31.5%
- v Adolescent girls 45.8% with low BMI
- v Households practicing open defecation 63.4%

Malnutrition status in the Bilaspur district including urban-poor

Total no. pre school children	Malnutrition status (No. of Children)				Severe Malnutrition
	Green Colour	Yellow Colour	Red Colour	Total Malnutrition %	
185336	150408	30636	4292	18.85%	2.32%

Source: Mahila Bal Vikas Vibhag, Bilaspur

Promising characteristics of technology

S. No.	Characteristics	Observation (Unit)
1.	Per capita consumption	272.2 (g/day)
2.	Percentage change in consumption	23.33 (per cent increase)
3.	Recommended Daily Allowance(RDA)%	90.73%

Characteristics of Technology

Characteristics	Unit
Quantity of vegetable	production/unit
Achieve Improve Nutritional Status	Increasing Nutritional Intake 25%
Increase Immunity	10%

Anthropometric parameters (Mean 40 farm women) Before Intervention & After Intervention

Consumption of nutrients/day		Anthropometric measurements of farm women							
		HB %		Weight (Kg)		Height (m) ²		BMI (Kg/m) ²	
B	A	B	A	B	A	B	A	B	A
123.65 g	285.50 g	8-10	11-13	49.15	58.65	2.96	2.96	16.60	19.81

Yield parameters for nutritional garden

Technology	Yield (kg/ 100 sqm/year)	Per capita Consumption gm/ day	% change in Per capita Consumption gm/day	% RDA
FP	480.52	123.65	2.31	(-) 65.94
RP	865.50	285.50		(-) 22.59

* Per Capita daily requirement of vegetables 350 g/day

Consumption of nutrients/day	CHO (g)	Energy (cal)	Fat(g)	Protein (g)	Calcium (mg)	Vitamin A (mg)	Vitamin C (mg)
Before	11.3	43.4	0.25	2.23	32.15	787.6	18.6
After	24.5	91.6	0.38	3.56	41.8	882.7	26.6
% RDA	116.81	111.06	52.00	59.64	30.02	12.07	43.01

Economic parameters

Formulation of product	Input used	Yield (kg/200 sqm/year)	Input cost (Rs.)	Gross income (Rs.)	Net Income (Rs.)	B:C ratio
FP	Vegetable crops	386.00	960	7720	6760	8.04
RP	Vegetable crops	1050	1950	21000	19050	10.77

Mean selling price Rs. 20/kg

Technology spread from KVK Kanker

- First it was demonstrated at KVK Farm,
- Replicated in 10 Residential Schools
- Replicated in 80 residential schools (Ashram)
- Dissemination in whole district through training, demonstrations.
- Disseminations in whole state

Horizontal spread of technology in IG KV, KVKs

Name of KVK	No. of Village covered	No. of Farm women	No. of Schools	No. of Unit
Bilaspur	40	86	03	89
Kanker	80	270	80	350
Gariyaband	25	-	25	25
Raigarh	05	50	-	50
Raipur	03	-	3	03
Ambikapur	15	100	1	101

Horizontal spread of technology by RVSKVV, KVKs, (Seasonal vegetable and fruits plant)

KVKs	No of villages covered	No of farmers	Area in ha	Mean yield (kg/200 qm/year)	Cost Rs./ha.	Net return Rs./ha	B:C ratio
Guna	48	1265	42	1050	1950	19050	10.77
Ashoknagar	25	250	25	1035	2100	18600	9.86
Gwalior	10	100	10	1310	3156	23044	8.3
Rajgarh	20	125	30	1000	2600	17400	7.69
Ratlam	27	115	45	950	1925	17075	9.87
Badwani	30	325	62	835	1860	14840	8.98
Ujjain	20	600	15	1030	2050	18550	10.05
Neemach	32	650	40	945	1800	17100	10.5
Shajapur	32	310	58	900	1900	16100	9.47

Horizontal spread of technology by KVK - JNKVV, Jabalpur

No. of village covered	No. of farmers	Area in ha or No. of units
2331	23051	8212

Nutritional garden established at Schools by KVK Kanker



Primary School Godbinapal



Primary school Bagodar



Middle school PV 19

Name of schemes supported by Central/State Govt. in large scale dissemination under convergence

S.No.	Central Govt.	State Govt.
1	MG-MNREGA	District Mineral Fund (DMF)

Economics of Adopted Technology (200 sqm)

Cost (Rs/ha)	Gross return (Rs/ha)	Net return (Rs/ha)	B:C ratio
800/-	1200/-	400/-	1.5

Impact of adopted technologies

Economical	Social
<ul style="list-style-type: none"> In schools, fresh and organic vegetables available for students. Saving an amount of Rs. 12000/- per school in six month. Perennial vegetables like Jackfruit, Drum steak, and fruits Papaya, Banana, Guava were also planted for availability of seasonal fruits and vegetable. 	<ul style="list-style-type: none"> They can use their leisure time. Beneficial for physical health. Use kitchen waste for vermi compost Use waste water for gardening Better decision making and planning Student of the school where nutritional Garden programme is being implemented get involved with agricultural practices and this reconnected them with farm and soil.

Glimpses of activities



Mid day meal with fresh vegetable



Income generated through Nutrition garden



Nutritional security through Nutrition Garden

News Papers Coverage



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**Director, ICAR-Agricultural Technology Application Research Institute,
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Compilation & Editing :

**Dr. Anupam Mishra, Director
Dr. S. R. K. Singh, Principal Scientist (AE)
Dr. A. A. Raut, Scientist (AE)**