

Annexure-V

KRISHI VIGYAN KENDRA, AMBALA

Increase in productivity and impact in farmers in the form of Success Stories published in
APR (2015-16)

I. Diversified Farming System : Mungbean

SH. RAMESH KUMAR S/O BIJRAM SINGH
(Adopt diversified farming system)
Village: Gheldi, Tehsil: Barara, District: Ambala (Haryana) Mob. No. 09466326869

Profile			Description of the Farmer
Age	:	48 years	Sh. Ramesh Kumar is doing farming for the last 25 years. Earlier he used to do conventional farming. Since the KVK interventions in 2013-14, he started improvement in his farming. He has, now diversified his farming and opted summer mungbean cultivation. He has also adopted RCT practices such as Laser land levelling, sowing of wheat with Drill, M. B. Ploughing and Improved varieties of rice, wheat and mungbean.
Education	:	6 th	
Landholding	:	2 ha	
Farming experience	:	25 years	
Conventional Farming Sugarcane –Wheat –Rice Rice-Wheat (Broadcasting) Innovative Diversified Farming Sugarcane –Toria- Mungbean-Rice Rice-Wheat-Mungbean (Line Sowing) Laser leveling & gypsum application			




Field day organised at Sh. Ramesh Kumar plot

Economics of Summer mungbean						
Variety	Method	Yield (qtl/ha)	Cost of production (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	BCR
MH-421	FLD	12.5	16250	81250	65000	4.00
SML-668	Local	7	15200	45500	30300	3.00

Economics of improved and diversified cultivation				
Crop	Input Cost (Rs./ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	BCR
Wheat +Moong + Rice	72485	236975	164490	3.27

Economics of conventional farming				
Crop	Input Cost (Rs./ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	BCR
Wheat and Rice	56235	155725	99490	2.76

He has taken summer mungbean after harvesting of wheat and before transplanting of paddy. For timely sowing of Mungbean, he has harvested wheat through manually. Applied pre irrigation for better field preparation and to achieved good germination. The seed were treated with bavistin, rhizobium culture and sown line to line with seed cum fertiliser drill. Gypsum and zinc sulphate were applied during field preparation and urea & single super phosphate (SSP) applied at the time of sowing. He was applied Stomp (Pendimethalin) 30 EC just after sowing @ 2.5 lit/ha and one hand weeding done as required for weed control. Only one irrigation applied at 30 DAS.

In improved diversified farming his gross income and net return was 236975 and 164490 respectively, Which is **34 and 40** percent higher as compared in conventional farming. Which has been clearly seen with the higher BCR (3.27) under diversified farming against BCR (2.76) in conventional farming.

While in comparison of economics in summer mungbean cultivation, the yield and net return were 12.5 qtl/ha and 65000 Rs/ha, which was **44 % and 53%** higher as compared to local check. The BCR under FLD was 4 and local check was 3.

Dr. Rakesh Choudhary, SMS (Agronomy), Krishi Vigyan Kendra, Ambala

II. Diversified Farming System : Mungbean

Sh. Bhupinder Singh S/o Gurcharan Singh
(Adopted diversified farming system)
Village: Tepla, Post: Saha , District: Ambala (Haryana) Mob. No. 9416029454

PROFILE

Age	:	52 years
Education	:	12th
Landholding	:	1.5 ha
Farming experience	:	35 years

Conventional Farming

Rice-Wheat (Broadcasting)

Innovative Diversified Farming

Rice-Wheat-Mungbean (Line Sowing)

Laser levelling , Leaf colour chart (LCC), Happy seeder & gypsum application



Dr. Mahesh Kumar & KVK team visited the FLD plot



Scientist visited mungbean FLDs field

DESCRIPTION OF THE FARMER

Sh. Bupendra singh is doing farming for the last 35 years. Earlier he used to do conventional farming. Since the KVK interventions in 2007-08, he started improvement in his farming. He has, now diversified his farming with summer mungbean cultivation. He has also adopted resources conservation techniques practices such as Laser land levelling, Leaf colour chart (LCC), sowing of wheat with Drill, M. B. Ploughing and Improved varieties of rice, wheat and mungbean.

ECONOMICS OF SUMMER MUNGBEAN

Variety	Method	Yield (qtl/ha)	Cost of production (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	BCR
MH-421	FLD	11	16250	66000	49750	4.06
SML-668	Local	7	15200	42000	26800	2.76

ECONOMICS OF IMPROVED AND DIVERSIFIED CULTIVATION

Crop	Input Cost (Rs./ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	BCR
Wheat + Moong + rice	72485	221725	149240	3.06

ECONOMICS OF CONVENTIONAL farm

Crop	Input Cost (Rs./ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	BCR
Wheat and Rice	56235	162375	106140	2.89

He has taken summer mungbean after harvesting of wheat and before transplanting of paddy. For timely sowing of Mungbean, he has harvested wheat through combine . Applied pre irrigation for better field preparation and to achieved good germination. The seed were treated with bavistin, rhizobium culture and sown broadcasting method. Gypsum and zinc sulphate and single super phosphate (SSP) were applied during field preparation and urea applied top dressing. He was applied Stomp (Pendimethalin) 30 EC just after sowing @ 2.5 lit/ha and one hand weeding done as required for weed control. Only one irrigation applied at DAS.

In improved diversified farming his gross income and net return was 221725 and 149240 respectively, Which is 36.5 and 41 percent higher as compared in conventional farming. Which has been clearly seen with the higher BCR (3.06) under diversified farming against BCR (2.89) in conventional farming.

While in comparison of economics in summer mungbean cultivation, the yield and net return were 12.5 qtl/ha and 66000 Rs/ha, which was 57 % and 86% higher as compared to local check. The BCR under FLD was 4 and local check was 2.7.

Dr. Rakesh Choudhary, SMS (Agronomy, Krishi Vigyan Kendra, Ambala)

III. Self employment through Pig Farming : A Success story of Sh.Paramjeet Singh

Introduction :

Piggery is the most potential source of meat production and more efficient feed converters after the broiler. Apart from providing meat, Pig is also a source of bristles and manure. Pig farming provide employment opportunities for rural youth and improve their livelihood food security in the country.

Krishi Vigyan Kendra, Ambala (Tepla) is organizing training programme on commercial pig farming and number of farmers from different district of Haryana particularly Karnal, Kurukshetra, Yamunnagar, Ambala, Sonipat, Panipat and other states like U.P., Uttrakhand, Delhi, Punjab and participating and getting success in Pig farming.

KVK Interventions

Sh.Paramjeet Singh a large farmer having 10 hacture agricultural land. He grows wheat and paddy crops as well as Popular and Eucalyptus in the field. Sh.Paramjeet Singh S/o Sh.Darshan Singh, Village Chudiala of Ambala district approached to KVK,Ambala to establish the Pig unit and he got training on Pig farming in 2015. After training programme he constructed a Pig Farm of 200'X60' of size in his village. KVK provided 20 Large White Yorkshire piglets for his farm and scientist helped in selection and procurement of pigs from other areas of pig farms established by the KVK.



KVK OFT on Pig Farm, Chudiala

Output :

Presently he is maintaining around 150 sows and 4-5 boars at his farm. Our KVK Scientist made a video and farmer loaded on You tube by the name of Ambala Pig breeders,Chudiala for its popularization. The main output in pig farming achieved by sale of piglets, Gilt, boar, sow & manure.

Outcome:

The farmer, Sh.Paramjeet is selling weaned piglets @ Rs.2500-2600/- and pregnant sow around Rs. 15000-16000/- to other farmers/traders. In 2016-17 he sold the piglets and earned approximately Rs. 15.00 lacs and got net income Rs. 7.50 lacs. Now, Sh.Paramjeet Singh become a Progressive Pig Farmer in the district and he is providing quality White Yorkshire breed to other farmers also.



Hon'ble DDG,ICAR & Director, ICAR-ATARI visited Pig Unit,Chudiala

Impact :

This success has been achieved distinctly over the short period of time in a sustainable manner. He has also provided full time employment to a family at his farm.

Looking to this success more number of un-employed educated rural youth have been motivated and approaching to KVK to establish the Pig farm in the district and other regions.



Exposure visit of KVK trainees (Pig Training)

IV. Women empowerment through Self-help Groups :Mrs.Beant Kaur

Krishi Vigyan Kendra, Ambala



Thematic Area : Women Empowerment through Self-help Group

PROFILE

Name of SHG	Sohang Self-Help Group, Nagla
Leader's Name	Mrs.Beant Kaur
Address	Vill.Nagla Jattan, Post Saha Distt.Ambala(Hry.)
Mobile	9050693762



INTRODUCTION

-Sohang Self Help Group started in the year 2016 with a group of 10 members under leadership of Mrs.Beant Kaur. The SHG was formed, registered and monitored by Forest Department of Ambala (Haryana). The saving of Rs. 200/- per month/ per member and loan given to SHG member @ 2% p.m. for purchase of buffalo & health problems.

Association with KVK

-This group was approached by KVK team for technically guidance, knowledge & skill upgradation and need base interventions in the year 2016.

-Organise skill base training programmes : Art & Craft, Rakhi making, Stitching & Embroidery, Value addition(Fruit & veg.preservation), Minimization of nutrient loss during cooking, Vermi compost etc.

-Knowledge upgradation through active participation in group interactions , foreign delegates interaction, learning by doing through practical vocational training etc., demonstration in various activities at KVK during Farmer's fair on Pradhan Mantri Fasal Beem Yojna, Exhibition, Women Day, Jal Sanrakshan & other extension programmes.

Training Photographs



Art & craft preparation



Rakhi making



Participation of Forest deptt & SHG members



Achievements

- Self marketing of products
- Good sale of products during festivals & season i.e. Candles, Rakhi, Decorative Thali & Tokries etc.
- Members of group having maniyari shop, doing online work of computer of Bajaj LIC and also doing other income generating activities

Social Recognitions

-This group has prove that "Where there is a will there is a way". This group has become an ideal model for other women in rural area as well as for young entrepreneurs of the district.

V. Bagh Mushroom Farm, VPO Dhanaura, Tehsil Barara, Ambala

1. Name of mushroom Entrepreneur: Er. Dilbag Singh S/o Sh. Sh. Kulwant Singh
2. Postal Address: Bagh Mushroom Farm, VPO Dhanaura,
Tehsil: Barara, District Ambala
(E-mail: bag.mushroom@gmail.com,
Web site: www.baagmushrooms.com
(Mobile No: 82220-00345, 82220-00567)
3. Date of birth: 08 October 1987
4. Gender: Male
5. Education qualification: M. Tech & B. Tech
6. No of family members: Adult Male: 2 Adult Female: 2 Children (<18 yrs): 1 Total: 5
7. Land holding (Acres): a. Rainfed
b. Irrigated -20 Acre
c. Plantation
d. Others (Dripping) -2 Acre Total 22

Machinery and infrastructure employed in your mushroom unit for each of the operations (Mark all those apply to your farm)

- 1) Compost/ substrate preparation
a) Compost Yard (✓)
b) Tunnel/ Steam chamber/ Boiler (✓)
c) Compost turner/ JCB/ Bobcat (✓)
d) Filling line or filling machine (✓)
- 2) spawn production
a) Autoclave (x)
b) Incubator
c) Laminar flow
d) Cold Storage facility
- 3) Cropping rooms
a) Multi-tier racks/ Hanging ropes (✓)
b) Insulation of walls (✓)
c) Temperature & RH meters (✓)
d) Temperature and RH control facility (✓)
- 4) Post harvest handling/ processing
a) Canning Line (x)
b) Mushroom Drier (✓)
c) Pickling facility (x)
d) Fortified products/ mushroom added foods (x)

Name of Mushroom enterprise:

Sl. No	Variety grown	Year of start	Production (kg per day)	Fresh mushroom produced per 100 kg compost	No of rooms / huts	Size of growing area (Sq. Ft) 30'x60' Single unit	Loan amount (in Rs.)	Subsidy amount available (in Rs.)	Total investment on the unit
1	White button	2011	500-600/day	18-20 kg	26 huts	46800	25 lacs (IOB)	8 lacs (NHM)	40.00 lacs
2	Oyster								
3	Milky	2014	15kg/day	40-42 kg	1 hut	1800	NIL	NIL	60,000
4	Paddy straw								
5	Shiitake								
6	Others (mention) Poly House (Cucumber & Capsicum)	2015	600-700 kg/day/acre	--	2 acre	2 acre area	85 lacs (Allahabad Bank)	45 lacs (NHB)	95 lacs

Awards and appreciations received recognizing your work in mushroom cultivation (Most important ones)

1. Awarded by State Horticulture Department on 22 March, 2016
2. KVK, Ambala appreciated in Extension Activities
3. Appreciation by ADC, Hon'ble Monica Malik during Unit Visit



Awarded by State Horticulture Department on
22 March, 2016



Awarded in Ni-msme programme at
KVK



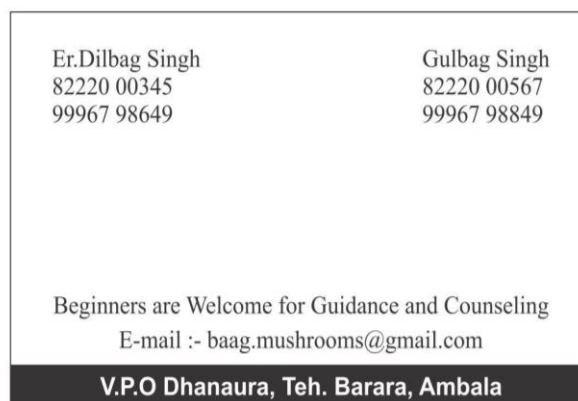
Stall of Baag Mushroom Farm at KVK campus

Major innovations and technologies used/ promoted by you (all information given on website: baagmushrooms.com)



Exposure visit of Mushroom Trainees organized by KVK,Ambala at Baag Mushroom Farm

Where you see yourself after one year in mushroom entrepreneurship?



*Future approach to build a Mushroom Association in our State to get better promotion of Mushroom

VI. KITCHEN GARDEN WITH VERMI COMPOST

Pragati Singh¹ , Upasana Singh², Ramesh Kumar³ & Amit Kumar⁴

KRISHI VIGYAN KENDRA,AMBALA

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Situation analysis /Problem statement

Good nutrition is the fundamental basic requirement for maintenance of positive health. A proper diet is essential from the very early stages of life for growth, development and active life. In rural areas of India malnutrition and poor health status is a common problem. It retards growth, increases the risk and duration of illness, reduces work output and slows social and mental development. For poor households, vegetables and fruits are often the only sources of micronutrients in the family diet. Nutrition garden play an important role for rural families to improve food security, provide diversified vegetable in their daily diet and fulfilling dietary and nutritional needs.

Plan, Implement and support

Keeping in the view above facts KVK Ambala conducted survey and interacted with villagers. It was found that only few villagers know about importance of kitchen garden, pest management & use of organic manure. So need here arise for knowledge up gradation regarding kitchen garden practice at rural household for which KVK Ambala has been working constantly. Scientific assistance has been provided regarding the plantation of seasonal seeds, use of organic fertilizer and compost, precautions for the disease & insect control , organized Method demonstration, training ,publish folder & conducted research etc.to the women for unable them to start small viable units of Kitchen gardening with vermi compost units in rural & urban area. Detail of each intervention are given below.

FARM WOMEN TRAININGS

S.No.	Dated	Training	NO.of traning	Participants
1	2010-11	Household food security by nutrition agriculture	4	80
2	2011-12	Household food security by nutrition garden	4	108
3	2012-13	Nutrition garden with Vermi compost	2	36
4	2013-14	Nutrition garden with Vermi compost	1	24
5	2014-15	Household food security by nutrition agriculture	4	63
6	2016-17	Nutrition garden with Vermi compost	1	19
7	2016-17	Household security by Terrace & nutrition Garden	1	26

1. Programme Assistant (Home Science),KVK,Ambala
2. Programme Coordinator, KVK,Ambala
3. SMS (Agril.Extn.),KVK,Ambala
4. SMS (Horticulture),KVK,Ambala

2. INSERVICE TRAININGS For the horizontal expansion of the kitchen garden with vermin compost , we also organized in-service trainings for aaganwadi workers & school teachers . During the training we have highlighted the benefits of kitchen gardening, pest management & use of organic manure etc.



INSERVICE TRAININGS for extension functionaries

S.No .	Dated	Training	extension functionaries	Participants
1	2011-12	Household food security by nutrition garden	Aaganwadi worker	60
2	2012-13	Nutrition garden with Vermi compost	Aaganwadi worker	19
3	2013-14	Household food security by nutrition agriculture	School Teachers	22
4	2014- 15	Household food security by nutrition agriculture	School Teachers	14
5	2016-17	Household food security by nutrition agriculture	School Teachers	19

METHOD DEMONSTRATION- KVK conducted method demonstration on “nutrition garden with Vermi compost “ .

S.No.	Dated	METHOD DEMONSTRATION	Participants
1	2010-11	Household food security by nutrition agriculture	22
2	2011-12	Household food security by nutrition agriculture	17
3	2012-13	Nutrition garden with Vermi compost	15
4	2013-14	Nutrition garden with Vermi compost	20
5	2014-15	Household food security by nutrition agriculture	14
6	2016-17	Nutrition garden with Vermi compost	14
7	2016-17	Household security by Terrace & nutrition Garden	20

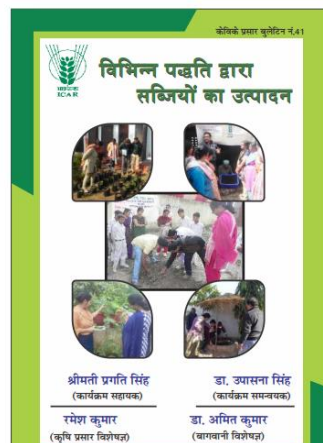


In addition to training , the technology was popularized by extension activity such as Method demonstration, display of technology in exhibition during the technology week & women's day through modal, poster & Folder.

Publication

- i. Booklet : “ vibhinn padhitiyo duara javik sabjiyo ka utpadan”
- ii. Poster : “ Impact of nutrition garden in schools”
- iii. Abstract : “Impact of nutrition garden in schools”
 “ Social attitude towards terrace gardening practices in Ambala district”
 (Global Agriculture & innovation Conference (GAIC – 2016) at Noida)

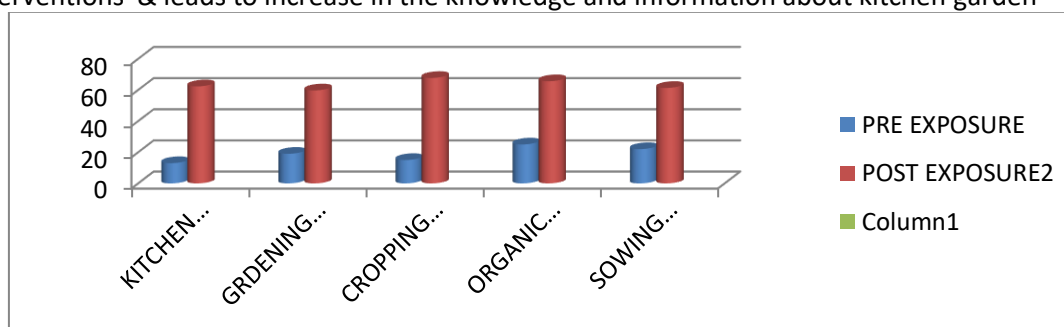
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News

Output

After imparting trainings FLD, & awareness Program on kitchen garden with vermin compost in the rural area. Results showed that majority of the respondents were sufficient gain in knowledge regarding nutrition gardening practice like Cropping pattern (67.7%), Organic manure (65.6%), Kitchen garden layout (62.3), Sowing technique (61.3%) & Gardening tools (59.7%). Nutrition level of the rural families which had established kitchen garden went on increasing with successive interventions & leads to increase in the knowledge and information about kitchen garden



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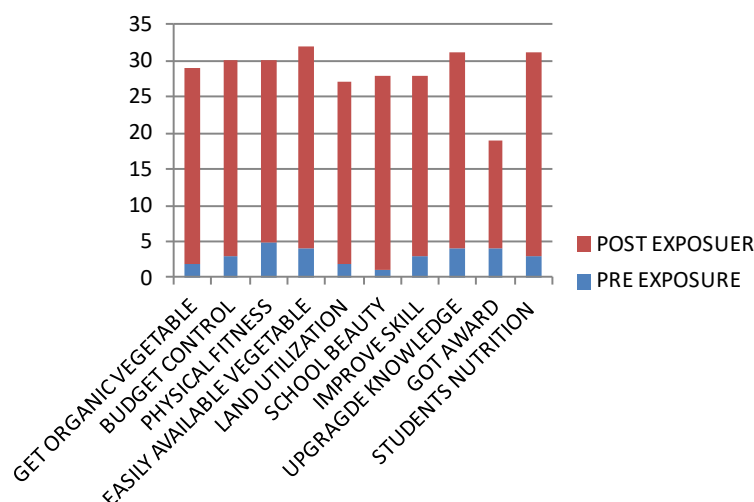
Outcome

With the efforts of KVK team Nutrition garden with Vermi compost has been popularized in different Govt. schools and aanganwadies centre & villages of Ambala district. Respondents were fully satisfied from nutrition garden. They have not only procured fresh and pesticide free vegetable but also cut short their meal budget due to adoption of nutrition gardening as a hobby. It is a fruitful activity to get fresh, organic and nutritious vegetable. Mostly respondents use it for their own consumption. After fulfilling their consumption 35% of people give the excess amount to their neighbours and other family members as a gift. Our future approach is to popularize and promote terrace gardening with vermin compost in urban areas.



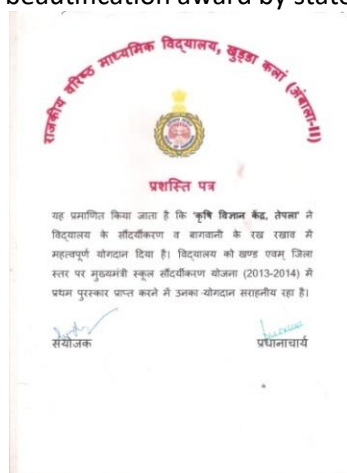
Impact

Earlier the respondent were not aware about kitchen garden management, use of organic manure & pest control but a vast change in knowledge and high favorable attitude was observed after KVK intervention. The impact of kitchen gardening was very positive as it gave healthy and nutritious food to the household members and also helped in reducing financial burden and keep them healthy and active. Graph shows that mostly respondents were getting fresh & organic vegetables, budget control and the percentage is 46 and also some people do it as a hobby or good time pass. As it is a fruitful activity to get fresh and nutritious vegetables so mostly people adopt it to get many benefits from it.



AWARDS

Some government primary, secondary and senior secondary schools got state & district level school beautification award by state government and Poster presentation award in GAIC-2016 at Noida :



Through use of kitchen gardening with vermi compost & bio gas plant people can live better and healthy living, enrich the surrounding with scientifically handling of waste as a manure. The study was undertaken to motivate and train women on recycling green waste as manure, utilized for kitchen gardening with vermin compost practices for the family. Majority of the respondents from rural areas of Ambala district were interested to attend training on kitchen garden to upgrade their skill and establish garden. Hence it was concluded that motivating organic kitchen garden should be promoted which may result in better use of household resource and improved caring practices and empowerment.

- Survey to fill the proforma.
- Survey for FLD on Improved variety of Seeds & Layout plan of Kitchen Garden (Different villages of Ambala district)
- Distribution of training kit (Seeds, Nursery, compost & literature etc.).
- Lecture delivered on Lay-out of Kitchen Garden, vermi compost preparation & pest management etc.
- Awareness through folder, poster & research.