SUCCESS STORY OF VEGETABLE CUTIVATION AT SIAHA DISTRICT, MIZORAM UNDER ICAR-IARI

Siaha District is located at the South - Eastern part of Mizoram and bounded on the south and east by Myanmar with an area of 133.9 km² and population of 56,574 (2011 census). There are 92 villages council and temperature during winter varies from 11° - 18°Cand 18°- 29°C in summer.

CHALLENGE

Majority of the farmers at Siaha District are new to commercial vegetable crops cultivation where the farms are left fallow after Kharif crops cultivation. The farmers cultivated crops for family consumption only, covering a very small land holding and few farmers grow kitchen garden from the seeds maintained by them for a very long period with less yield and inferior in quality. Introduction of commercial vegetable crops cultivation emerges as a challenge to meet the demand of local market as well as increasing the farm income for Sustainable income. Problem of the farmers were lack of knowledge on scientific cultivation of Rabi vegetable crops cultivation, non-availability of high yielding seeds, lack of inputs like farm yard manure in bulk, no irrigation facilities, fertilizers and pesticides which is not available at our district further there are no local dealers.

INITIATIVE

KVK,Siaha at the district level has taken initiative and rolls out in many villages by conducting motivational campaign, on-and-off campus training and demonstration on improved package of practices for cultivation of different types or commercial vegetable crop cultivation. Moreover, Seed Distribution programme was conducted in the presence of Deputy Commissioner, Siaha District, Siaha.

There is a general scarcity of water during winter season in our district. In order to cultivate Rabi crops successfully farmers were advises to make use of residual moisture available post monsoon season and to start sowing of seeds early by the end of august.

KVK INTERVENTION

- Provision of high yielding and improved seeds received from ICAR-IARI under NEH programme to farmers.
- Method demonstration on Nursery management to obtain healthy seedlings and reduces the quantity of required seeds.
- Land preparation and demonstration for transplanting of seedlings.
- Lime and farm Yard Manures application prior to planting.
- Right time of Transplanting and method of Irrigation was illustrated.
- Intercultural operation

- Gap filling and timely weeding was demonstrated.
- Integrated Pest Management and Integrated Disease Management.
- Diagnostic visit, Farmer Scientist Interaction, Group discussion, field visit, Need based training.

KEY RESULT

Sl.No	***Particulars***	***Tomato***	***Onion***	***Cucumber***	***Bitter Gourd***	***Brinjal***
1	Variety Name	PusaRohini	Pusa variety	Sonu	Sona Crispy white	Sona Ton
2	Season	Rabi	Rabi	Kharif	Kharif	Kharif
3	Area cultivated in hectare	1.5	1.2	2.5	1.8	2.3
4	Average price obtained per kg	40	30	30	70	60
5	Yield	19 t/ha	18t/ha	16 t/ha	8 t/ha	17.5 t/ha
6	Gross cost of cultivation	1,95,000	1,92,000	1,86,000	1,72,000	1,62,000
7	Gross return	7,60,000	6,82,000	4,80,000	5,60,000	5,20,000
8	Net income	5,65,000	4,92,000	2,94,000	3,88,000	3,63,000
9	B:C ratio	3.8	3.5	2.5	3.2	3.2

IMPACT

The impact of the programme was visible in production and productivity with horizontal spread in the district. After KVK intervention, the production level of vegetables and income of the farmers have increased two to three folds varying from village to village. Moreover, the availability of vegetable increased over the years has led to the change in consumption pattern by shifting focus from inter-state imported vegetables to locally available organic vegetables at higher price. Vegetables are also much fresher from farm to local market. This programmed provides a good opportunity for income round the year for farmers, farm women, rural youths and school dropouts.

Table 1. Comparisons of Vegetables Yield & Horizontal spread in the district

Sl. No.	Name of Crop	State Average yield (q/ha)	Average Yield of selected villages of Siaha district (q/ha)		Horizontal spread of technology		
			Before ICAR-IARI Programme	After ICAR-IARI NEH programme	No. of village	No. of farmer	Area in ha
1	Tomato	175	172	190	8	15	2.8
2	Brinjal	169	156	175	7	18	3.2
3	Onion	NA	140	180	5	10	1.8
4	Cucumber	88	81	120	16	45	9.1
5	Bitter gourd	131	121	134	12	32	7.4

Lesson learned

1. **What did you learn in this process? What was difficult or challenging?**

Farmers were impressed with the performance of high yielding and improved seeds where germination percentage of seeds received more than 96%.

Challenge: Farmers hesitate to adopt use of chemical fertilizers, pesticides and fungicides. Replacement of indigenous seeds with high yielding variety seeds.

2. **How did you overcome the challenges faced?**

To overcome the challenges, Awareness campaign, Training, demonstration, field visit, diagnostic visit and farmer scientist interaction were conducted.

3. **If you were to do it all over again, what would you do differently?**

Conducting field trip to nearby district or neighboring state to motivate farmers as "**Seeing is believing".**

Formations of Self Help Group (SHG) and Vegetable Grower Society for post-harvest sales of vegetables in organized manner.

Supporting quotes and images

"We are privileged to receive such kind of support resulting in increased farm income up to three folds in the past two years and we are extremely grateful"

Zese
Chheihlu, Siaha district, Mizoram
Mobile no:7085359504

"ICAR-IARI NEH Programme have been a blessing to our family through KVK Siaha as our vegetable production have risen and the quality of our farms have greatly improved"

T. Zachunga
Noaotla-III, Siaha district, Mizoram
Mobile no:8730897316

"The availability of high yielding seeds at our farm during critical time of sowing is beyond our expectation and we are very thankful".

Zeremia
Kiasi, Siaha district, Mizoram
Mobile no:8416076924

"The successful implementation of this programme is due to untiring efforts of officials through Farmer-Scientist interaction, timely official visit, advice given regarding postharvest management and marketing channel".

Ng. Salua
Chhaolo, Siaha district, Mizoram
Mobile no:9862684865

"To witness the successful harvest of vegetables during Rabi Season is a dream come true for our family. I am impressed with this technology intervention and look forward to continue vegetable cultivation.

P.Hrazo
Lobo, Siaha District, Mizoaram
Mobile no. 7085747176

CHECKLIST

S.N	Question to consider	Yes	No
1	Is the story interesting to the target audience?	Yes	
2	Does the story explain what new insights the research brings? What is the main lesson learned from this story? Does the story describe key insights on what works and what doesn't and something that future research could build on?	Yes	
3	Does the story describe the outcomes the research produced and the people who are benefitting? What changes-in skill, knowledge, attitude, practice, or policy-has the research brought, and who is benefitting from these changes?	Yes	
4	Does the story make a compelling point that people will remember? Does the story show how the research makes a difference to improving livelihoods and lessening poverty?	Yes	
5	Does the story provide an interesting fact that people will remember? For example, how much yields increased, how many hectares of land could become more productive from this innovation or technology?	Yes	
6	Does the story explain what kind of impact this innovation or technology could have if scaled up?	Yes	
7	Does the story show which partners contributed and how?	Yes	
8	Does the story include quotes from scientists or beneficiaries?	Yes	
9	Have links to other media are provided (journal articles, website news, newsletter, blogs, annual reports of ICAR, CGIAR Centres, CRPs) that also feature this story?		No
10	Have the contact details of people who can provide more information are provided?	Yes	

Onion cultivation at Siasi




Tomato Cultivation at Noaotla




Brinjal cultivation at Tipi Ferry




Bitter gourd cultivation at Lopu



Cucumber cultivation at Meisatla


SEEDS AND FARM IMPLEMENTS DISTRIBUTION PROGRAMME

EXTENSION ACTIVITIES

Farmer Scientist interaction

Method Demonstration

Farmers Training

Farmer's field Day

Diagnostic field visit

IPM Demonstration