Success story on Nutrition Garden

(Kitchen/backyard garden/terrace garden/vertical garden)

1. Title: Improving household dietary diversity through "Multilayered Backyard Gardening"

- **Details of beneficiary**
  - **Name: Smti. Hilole Kemp**
  - **Age : 56 years**
  - **Education: High School**
  - **land holding : 2 acres**
  - **Size of family : 6 nos**
  - **Address : New Sendenyu Village under Tsogin Block of Kohima District**
- **Size of nutrition garden (sqm): 2023.43 sqm (0.5 Acres)**
- **Crops grown in nutrition garden**
  - **Kharif: Colocasia-Maize-Ladys Finger-Soyabean-Paddy**
  - **Rabi: Broccoli and Cauliflower**
  - **Summer: King Chilli**
- **Growing condition (natural farming)**
- **Production and consumption of nutrition garden crops**

S.No.	Name of crops	Varieties	Area grown (sqm)	Production (kg)	Consumption (kg)	Sell of produce (kg)	Income from sell of produce (Rs)
1	Colocasia	Local	600	1000	200	800	40,000
2	Maize	Local	500	300	100	200	10,000
3	Ladys Finger	Arka Anamika	100	100	30	70	3500
4	Soyabean	MACS-1460	200	50	20	30	3000
5	Paddy	Local	500	200	200	-	-
6	King Chilli	Local	100	100	20	80	32,000

- **Success point:**

  The farmerwas encouraged to go for Multilayered backyard gardening for cultivation of diverse vegetablesprimarily for household consumption. She was provide with initial critical inputs and a pack of assorted seeds containing seasonal vegetables having a combination of leguminous crop, root crop, and vegetables like Okra, Bitter guard, Ridge guard, Cowpea , Cucumber, Pumpkin, Bottle guard, Snake guard, Palak, Drumstick, Brinjal, KingChilli, Tomato etc. The Multilayered backyard gardening model has been a success in several adopted villages. The collateral benefit from this model has been the empowerment of farm women through increased participation in cultivation practices and earnings from selling the excess produce in local markets. Smti. Hilole Kemp, wife of Shri.Phalo Kemp is a successful Multilayeredbackyard kitchen gardener from New Sendenyu village

under Tsogin Block of Kohima District. She has education only up to class VIII and did not have any prior knowledge of Multilayered Kitchen gardening. Through the model, she received vegetable seed kit for garden development. She adopted the technology and she is expecting 1750 kgs of vegetable produce. Out of which 570 kg was consumed by her family and 1180 kg was sold in local market to earn gross income to the tune of approximately 88,500 in a year. Now she is happy to enhance the nutritional affordability for her family and earn an additional income from sale of surplus produce.

- **Feedback:**
  "Earlier we usually grown very few vegetable either Colocasia or Maize in our home Garden. Our family comprised of6 members and we used to include only the above two vegetables in our diet. Our financial condition did not permit us to purchase vegetables from market. I am thankful to KVK, Kohima for supporting us in establishing nutrition garden. Now, the garden help us to access many vegetables including okra, brinjal, soyabean, palak, coriander, spinach, bitter gourd, tomato, radish, ridge gourd,King chilly, banana and papaya. After mitigating the household requirement, the surplus vegetables are sold in the market."
  Good quality photographs

2. Title: SAAT DIN SAAT KYARI "Seven Days Seven Plots"

- **Details of beneficiary**
  - **Name: Ms. Visanuo**
  - **Age : 26 years**
  - **Education: Graduate**
  - **land holding : 1 acre**
  - **Size of family : 7 nos**
  - **Address :NerhePheza Village under Chiephobozou Blockof Kohima District**
- **Size of nutrition garden (sqm): 1500 sqm**
- **Crops grown in nutrition garden**
  - **Kharif: Maize-Colocasia-Pumpkin-Sweet Potato**
  - **Rabi: Garden Pea and Onion**
  - **Summer: Spring Onions**

- **Growing condition (natural farming)**
- **Production and consumption of nutrition garden crops**

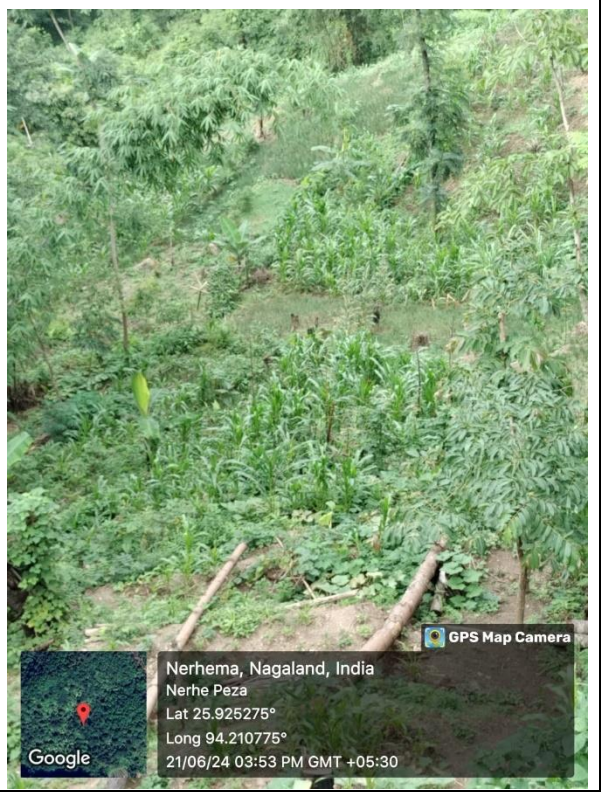
S.No.	Name of crops	Varieties	Area grown (sqm)	Production (kg)	Consumption (kg)	Sell of produce (kg)	Income from sell of produce (Rs)
1	Maize	Hyb. Sweet Corn var. H-59	500	350	100	250	25,000
2	Colocasia	Local	200	100	50	50	2,500
3	Pumpkin	Local	100	80	40	40	1200
4	Sweet Potato	Local	200	150	50	100	5000
5	Garden Pea	KSP-110	200	100	40	60	6000
6	Onion	AFDR	100	80	40	40	2,000
7	Spring Onion	Local	200	300	100	200	10,000

- **Success point:**

  Saat Din Saat Kyari is based on the concept of "Each kyari per day per week (especially for leafy vegetables) along with other seasonal vegetables". Crops (vegetable & fruit) are growing for entire year (season-wise) in kitchen garden in which limited land in the backyard divided into space for fruit plants and seven small plots. The Farmers were trained on the above mentioned garden design. The selected Farmer for the model garden was supported with agro-shade net for fencing and watering can for life saving irrigation. She was further trained to practice Non-Pesticide Management and application of ecofriendly formulations for soil and plant health, to grow chemical free vegetables in the nutrition garden. By using these effective and low-cost formulations, the farmer kept the crops free from pest attack and disease. So, through the promotion of Model nutrition garden under SAAT DIN SAAT KYARI "Seven Days Seven Plots" it has increased availability and access to different groups of vegetables; most of which are being consumed by the households. Over a short period, significant increase in the quantity and frequency of consumption of vegetables and huge demand generation from households suggests a positive trend as well as well acceptance of the approach of the model in the village. Initially Nutrition Garden Baseline survey reported that, less than 50 per cent of Households practiced traditional home gardening with limited cultivation of crops. Growing of vegetables were done primarily for commercial purpose only by few households. Majority of Households were growing only two or one vegetable in their home gardens. However, promotion of nutrition garden Model SAAT DIN SAAT KYARI "Seven Days Seven Plots"coupled with nutrition awareness programmes had a positive impact on the diversity of vegetables cultivated by the Households.By adopting thisModel she can produce 1160 kgs of vegetable. Out of which 420 kg was consumed by her family and 740 kg was sold in local market to earn gross income to the tune of

approximately 51,700 in a year. Now she is happy as nutrition issecured for her family and an additional income is earned from sale of surplus produce.

- **Feedback:**
  "In our perception nutrition garden requires more water and our village was lagging it. Henceforth, we had not prioritized nutrition garden as essential. As a result we used to intake very less vegetables than recommended. In the later stage when training cum awareness programme was provided on nutrition garden by KVK, Kohima, it boost our morale to establish nutrition garden in the backyard area. The vegetable seeds kit, watering can, bio-inputs, shade net for fencing being provided by the Institution motivated me for continuing the garden throughout the year. The household waste water is being used in my garden. Now from this garden we are getting all kinds of root, leafy and other vegetables in everyday for household consumption and some portion of it I also share with our relatives too."
  Good quality photographs



3. Title: Crop Specific vegetable gardenfor more income generation

- **Details of beneficiary**
  - **Name: Smti. Suno Angami**
  - **Age :65 years**
  - **Education: High School**
  - **land holding :3 acre**
  - **Size of family :6nos**

- **Address :Sechu-Zubza Village underKohima District**

- **Size of nutrition garden (sqm): 2000 sqm**
- **Crops grown in nutrition garden**
  - **Kharif: Ginger var. Nadia**
  - **Rabi: Cabbage var. Rareball**
  - **Summer: Maize, Spring Onions**
- **Growing condition (Organic farming)**
- **Production and consumption of nutrition garden crops**

S.No.	Name of crops	Varieties	Area grown (sqm)	Production (kg)	Consumption (kg)	Sell of produce (kg)	Income from sell of produce (Rs)
1	Ginger	Nadia	500	700	200	500	55,000
2	Maize	Hyb. Sweet Corn var. H-59	400	300	50	250	10,000
3	Cabbage	Rareball	1000	800	100	700	17,500
4	Spring Onion	Local	100	200	100	100	15,000

- **Success point:**

  The Specific cultivation of vegetables helped them in obtaining satisfactory amount of vegetables which they consumed themselves as well as sell in nearby local market. KVK, Kohima conducted demonstration on cultivation of CabbageVar. Rareball in 10 farm households in Sechu-Zubza Village. The layout of the garden was 1000sq.m and a number of bed made for vegetable production. The average yield: 800 kg from 1000 sq. m area which fulfils daily requirements of Vit A, Vit C, Calcium, Iron and minerals (as per RDA) for 60 days of a family with average six members (both adults and children). Establishment of a nutrition garden helped them in obtaining the essential nutrients. The nutrient deficiency diseases will be diminished by consuming vegetables from it.

  Feedback:

  "We are very happy for the support being provided by KVK, Kohima such as vegetable seeds, watering can, shade net along with regular technical guidance and training programmes. All these have motivated us to establish an ideal nutrition garden in our backyard where we are growing all kinds of vegetables, which earlier was kept fallow. The garden not only provides us different vegetables but also reduces our expenditure on vegetable purchase. We are growing these vegetables organically, expected it will reduce our morbidity."

  Good quality photographs

4. Title: Terrace Gardening for urban household nutritional security

- **Details of beneficiary**
  - **Name: Smti. Alemla Ao**
  - **Age : 60 years**
  - **Education: Graduate**
  - **land holding :100 sq.ft**
  - **Size of family : 6 nos**
  - **Address :Kohima Town underKohima District**
- **Size of nutrition garden (sqft): 100 sqft**
- **Crops grown in nutrition garden**
  - **Crop: Tomato & King Chilli**
- **Growing condition (Organic farming)**
- **Production and consumption of nutrition garden crops**

S.No.	Name of crops	Varieties	Area grown (sqft)	Production (kg)	Consumption (kg)	Sell of produce (kg)	Income from sell of produce (Rs)
1	Tomato	ADV-1541	50	80	80	-	For household consumption
2	King chilli	Local	50	60	60	-	

- **Success point:**
  Urbanization and growing population is a big threat to nutritional security. Terrace garden is one of measure to utilize the available open space in a productive way. Krishi Vigyan Kendra, Kohima conducted demonstration on terrace gardening in Paramedical Colony, urban area of Kohima district. Initially three urban women were selected in 2022 for demonstration and it reached out to 10 families. Inputs were provided by the KVK to them with training on establishment and management of terrace garden. Area covered under terrace garden was 100 sqft. roof top/terrace

from which 140 kg vegetables were produced annually. This way terrace garden not only provided nutrition to urban family but also minimized their cost for vegetable purchasing.

Feedback:

“Smti. Alemla Ao lives in a family with six members in Paramedical colony under Kohima District. She established terrace garden (area 100 Sq.ft) with the help of KVK-Kohima in the year of 2022. Now she became a motivator for many women in the area. Krishi Vigyan Kendra supplied vegetable kits and vegetable seedlings. She adopted the technology given by KVK experts as a result of which she produced 100-150 kg of vegetables. She is happy to enhance the nutritional security for her family and also saving of household budget. Due to her success the urban women were encouraged to go for cultivation of diverse vegetables primarily for household consumption and established 10 terrace gardens in the same locality.

Good quality photographs

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Success story on value addition

5.Title: Value-Added Processing of Underutilized Fruits & Vegetables: A Treasure for Naga's Future

- **Details of beneficiary**
  - **Name : Sole Tep**
  - **Age : 34**
  - **Education: M.A**
  - **land holding: 1 acre**
  - **size of family: 4 nos**
  - **Address: Tseminyu Town**
- **Crop:** King Chilli, Ginger, Jackfruit & Banana
- **Value added product:** King ChilliPickle, Ginger Candy, Jackfruit Chips & Banana chips.
- **Details of value added product**

Amount produced (gm/kg)	Cost of produce/kg	Market price of produce/100 gm	Net income/kg	Shelf life of produce	FSSAI Certification (yes/no) If Yes, certification number
1150	**400**	**200**	**2000**	**3 to 6 months**	**Yes/ 21922021000445**

- **Success point:**
  Value addition activities not only provide employment opportunities but also supplied nutrients in the rural areas. KVK, Kohima under NARI programme promoted value addition training to the farm women for economic empowerment as well as to supply nutrients from the value added local farm products. Under this programme, two off campus programmes were conducted for the farm women and women Club members during the year 2023-2024.
  The participants were from Ziphenyu Village (20 nos) and Tseminyu Town (20 nos) under Kohima district. During theprogramme, theory as well as hands on practical sessions were conducted where the participants were trained on making of various value-added products like Pickle preparation, Candy making, Squash, Jam, Jackfruit & Banana chips, Marmalades etc. and on preparation of nutrition rich dishes by locally available resources were also trained followed by Packaging & labelling of prepared food products for sell and exhibitions. Importance of FSSAI certification and facilitation for its registration was also highlighted during the training programme.

- **Feedback**

During the demonstration period, as per results of the demonstration the average quantity of produce per kg was 1150 g/kg followed by Organoleptic test as per 9 point hedonic scale, where the results indicates Colour (7.88), Flovour (8.25), Texture (8.38), Overall acceptability (8.50), Shelf life (Upto 3 months (Chips and candies) and 6 months (Pickles & Squash) compared to only 2 to 3 weeks in local check. The highest yield was (1200 gm/kg), lowest yield (800 gm/kg), and average yield (1150 gm/kg)

compared to local check (750 gm/kg). The percentage of increase in yield i.e., change in average yield over local was 34.78 %.

The Agri-preneurs are selling their items @ Rs. 150/- /100 gm (Wholesale), fetching a gross return of Rs. 3,75,000/- with a net profit of Rs. 3,15,000/- in a year (Approx. estimation). As value addition is one of the fastest growing food sectors globally and driven by increased consumer demand, and with the intervention by KVK, Kohima, the eagerness to try improved technology-based product making has influenced many youths to go for value added product making.

After the successful intervention made by KVK under this sector more number of youths were interested to take up this sector as an enterprise, so further dissemination through trainings and method demonstrations were carried out in different locations for horizontal spread. The extent of adaptation in the district was 40%.

- **Good quality photographs**