



**World Bank Financed Climate Smart Irrigated Agriculture Project  
(CSIAP)  
Ministry of Agriculture (MoA)**

**Findings of the Survey  
Climate Smart Nutritional Sensitive Home Gardening  
Program - 2020**



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## Introduction

The key objective of this program was to promote 2695 Climate-Smart Agriculture home gardens in the hotspot area with the target of ensuring food and nutrition security of the family. This would support not only ensure food and nutrition security of the family but also promote the entire food production of the nation through the self-sufficient home garden. It would be expected to increase the productivity of the site through utilizing the vertical and horizontal spaces available therein and also expected to expand home gardening through introducing land decoration, Climate Smart Agriculture Practices, & Techniques. The result of the home garden field visit is analyzed and is presented here.

As per the recommendations of the World Bank, the Project Director of the CSIAP appointed the Safeguard team attached to Deputy Project Director's Offices and the Project Management Unit to do a field visit survey on the Climate Smart Nutritional Sensitive Home Gardening Program (CSNSHGP) in the hotspot area. The teams of the Provinces and the PMU visited the fields to observe, monitor, complete the questionnaire survey and generate necessary data. To identify gender concerns and inform the design of the 2<sup>nd</sup> phase of the project. Then, the Gender Development Officer of the PMU/ CSIAP prepared a comprehensive report by analyzing all sets of questionnaire surveys on the impact of the Climate Smart Nutritional Sensitive Home Gardening Program which was implemented by the CSIAP in the hotspot area in 2020.

### Some of the key findings are as follows:

- Their income is increasing and women are known to be good savers and use their money to support their children's education etc.
- Average income from the home garden was identified and was reported money-saving habits through commercial banks and Seettu system.
- The majority of the beneficiaries are expected to continue the home gardening and keep crop-seeds for the next season in advance.
- Positive social cohesion and social interaction were identified.
- Women farmers are seeking labor from their husbands, sons, or brothers, or neighbors in preparing the land and selling their product in the market.
- Most of the beneficiaries said that they are using vegetables in the three meals daily. Before they start home gardening, they consumed a minimum of one vegetable for lunch but neither for breakfast nor for dinner.
- Women said that these days children are not going to school due to the COVID 19, and staying at the home. Therefore, they are happily eating different varieties of vegetables in their three meals and a minimum of two or three vegetables for lunch.
- Other people in the village who saw the improved home gardens have also been inspired to grow their own.
- Female members in the Producer Society have gradually developed public speaking habits. It seems that the voice of women and their involvement in decision making are gradually increasing.

- In-kind income from the home garden was more important than cash income as conformed by the beneficiaries. Women expressed that their home gardens allowed them to provide their household with more and better-quality food, and lessened their dependency on men to purchase food from the market.
- Women said that they normally had to wait for whatever food their husbands would bring home, therefore, the more productive home gardens made food more readily available whenever there was a need for it. This allowed them to serve vegetables more regularly, thereby diversifying the household diet. The women mentioned that they did not have to ask their husbands to buy vegetables, they could occasionally ask them to buy other foods such as fish or meat, further contributing to dietary diversity.
- Allocation of time to productive and domestic tasks and satisfaction with the time available for leisure activity. Women said that they can do all kinds of garden work themselves, but men would usually offer to help with certain strenuous tasks such as preparing the land and planting beds, making the drains, and erecting fences. However, women did most of the other activities such as harvesting, watering, planting and weeding.

### The objective of the field visit survey

The objectives of the field visits were to identify the success, failures, and lessons learned from the CSNSHGP in the hotspot area which was implemented by the CSIAP in 2020, and to identify gender concerns in some selected areas & to apply the experience when implementing the 2<sup>nd</sup> phase of the CSNSHGP by the CSIAP.

### Methodology

Out of 2695 CSNSHG beneficiaries, 10% of the total beneficiaries' households were selected for the field survey. A simple and random sampling method was applied and 269 household visits were planned in the first phase of the home gardening program of the CSIAP.

Accordingly, the safeguarding team of the Provinces and PMU visited Monaragala, Hambantota, Kilinochchi, Mullaitivu, Trincomalee, Ampara, Batticaloa, Anuradhapura, Polonnaruwa, Puttalam, and Kurunegala districts.

### Sub-project Implementation

When implementing the CSNSHGP, initially, IEC & ICT Campaign was conducted at the ASC level, then, beneficiaries were selected according to the selection criteria which was prepared by the PMU, and then the CSIAP has supplied inputs valid around Rs.

18,600 per woman beneficiary to promote the CSNSHG Program in the minimum extent of ¼ acres of land.

Province	Total Number of Beneficiaries Selected for the CSNSHGP	Number of households selected for the field visit
Northern Provinces	400	40
Eastern Province	785	79

<b>Uva Province</b>	135	14
<b>Southern Province</b>	165	17
<b>North Central Province</b>	425	42
<b>North Western Province</b>	750	76

Seeds and other inputs were supplied in September 2020 and they have started the cultivation in October 2020. The breakdown of the inputs supplied given below.

<b>Input List for CSNSHG</b>	<b>Estimated cost (Rs.)</b>
10 Packs of vegetable seeds (ladies finger, tomato, bitter guard, snake guard, brinjal, chili, long bean, wing beans, luffa, and curry chili)	500.00
Fruit plants (2 No. of Mango, 1 No. of Pomegranate, 1 No. of Guava, 1 No. of Orange, 1 No. of Sour Sop)	1000.00
Planting material of ginger, and turmeric	1500.00
100 bio-degradable grow bags	3000.00
Installation of rainwater harvesting system from roof + PVC water tank (500 l)	6000.00
Home garden tool kit (Containing fork, spade, secateurs, watering can, 1 Kg. of Black polythene)	3000.00
Poly mulching mats (01)	3600.00
<b>Total</b>	<b>18,600.00</b>

### **Intended impact:**

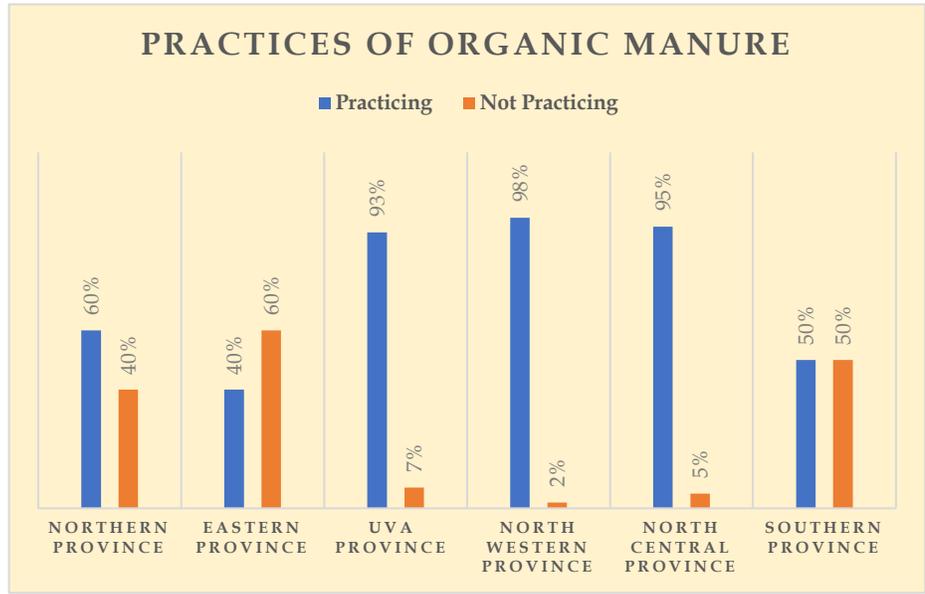
Women empowerment as improvements across five dimensions by analyzing the information collected and generated during the CSNSHGP field visit monitoring.

#### **1. Production Decision:**

Women farmers make a critical contribution to the rural economy in the hotspot area of the CSIAP. They are the key stakeholders of the Climate Smart Nutritional Sensitive Home Gardening Program of the CSIAP. Following CSA practices were observed in the CSNSHG field.

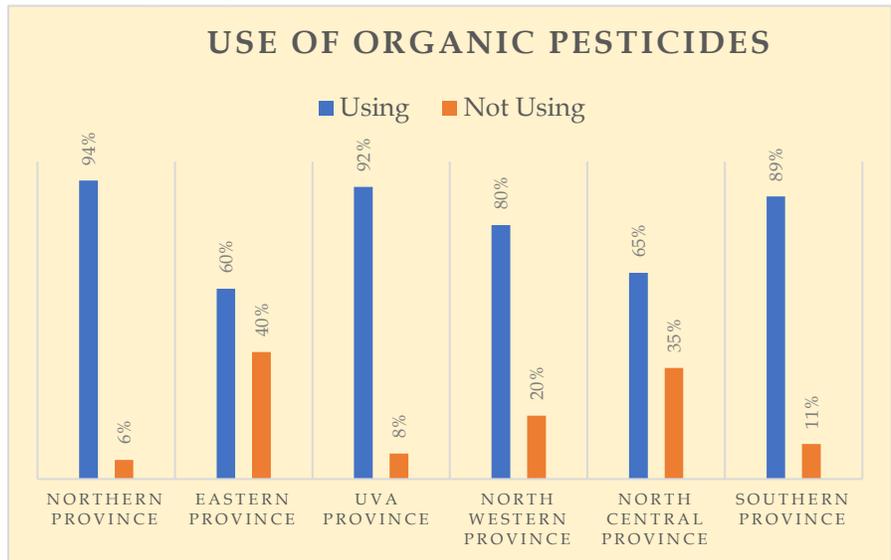
1. Practices of Organic Manure
2. Use of Organic Pesticides
3. Practicing Mulching
4. Using Live fences
5. Using Soil Construction Bunds

In the Northern Province, 60% of people are practicing organic Manure in their home gardens. They have collected dried leaves materials, daily household waste, and mixed them with cow dung and hen dung to prepare the manure. One young lady said that she prepares organic manure weekly basis with cattle waste. In Eastern



Province, 40% of farmers are in the Gomarankadawala GN division practicing compost making in their home gardens. In Monaragala District 93% of people are practicing organic manure. In Southern Province, 50% of beneficiaries are practicing organic manure. In North-Western Province 98% of people are using cattle waste, vermin compost, dried leaves, hen dung, cow dung, and daily household waste. The mixture of garlic, ginger, and chilies which stored for 03 days, after that those are used one time a day as pest control liquid. In North Central Province, cattle shed wastes (urine dung) and crop waste are used as organic manure and 95% of them are practicing organic manure.

When this study observed the use of organic pesticides and Pest control methods for their home garden, it was interesting that they have collected Neem leaves, and used the onion, and garlic mixture was used for the pest control method.



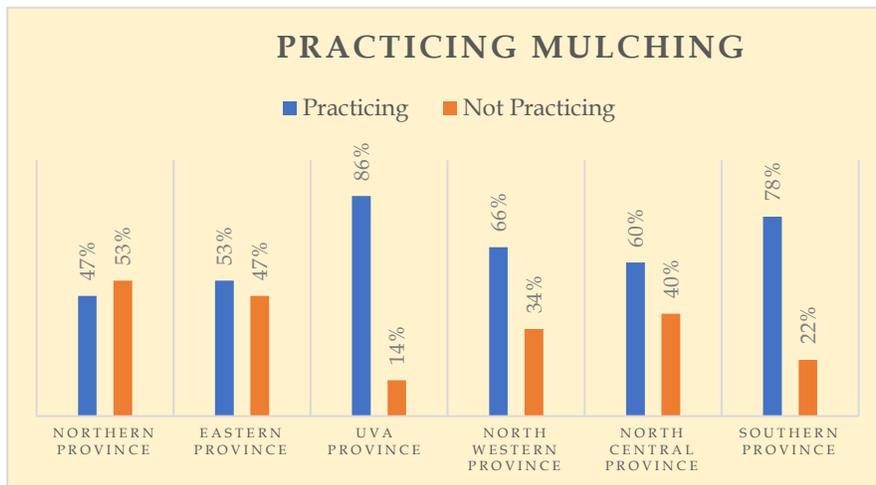
In Northern Province, 94% of farmers are using organic pesticides for home gardening activities. Neem extract, and the spray of Ash as a pest control method in their home gardens.

One young lady said that she prepares “Agni Astram” while watching a YouTube video (chili, tobacco, garlic, neems leaves, and cattle urine) to control pests.

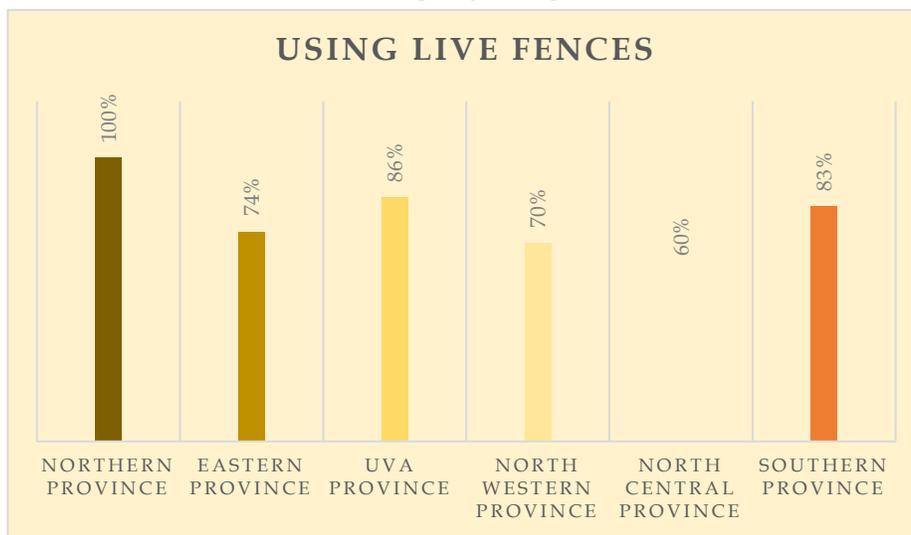
Especially, in the Eastern province, 60% of farmers in the Thennamaravady GN division are using Garlic extract, Tobacco extract and neem extract to control the pests. 10% of farmers are using firewood ash as a pest repellent in Eastern province. Women mentioned that they are interested to do home garden cultivation using some innovative techniques.

In Monaragala District, 92% of them are using organic pesticides as a pest control method at their home gardens. In Hambantota District, 89% of them are using organic pest control methods for their home gardens. In North-Western Province, 80% of them are practicing organic pesticides. In North Central Province, 65% of them are practicing organic pesticides.

When this study observes the practice of mulching, they are using dry leaves, coconut husk, chopped leaves for the mulching. In Northern Province, 47% of farmers are practicing mulching for home gardening activities. 86% of farmers are practicing mulching in Monaragala District. 78% of them are practicing the mulching in Hambantota District. In NWP, 66% of them are practising mulching in their home garden. 60% of them are practising mulching in NCP.



Home gardens were protected from wild animals and damage by using the live fence in Northern Province. They have used the woods, and the other 100% of beneficiaries are using the live fencing for the HG activities. 86% of home gardens were protected by the live fences in Monaragala District and 83% of home gardens were protected by the live fences in Hambantota District. 70% of them are using the live fencing for their HG in NWP. In NCP, 65% of them are using live fencing in their HG.



However, rainwater harvesting practices were not identified during the home garden monitoring field visits in Northern Province. Even though plastic tanks were distributed under the project to harvest rainwater, they did not use them for that purpose. All of them received 500L plastic water tanks. Nobody uses the tanks for collecting rainwater, only 15% of farmers have used the water tank to store the tube well/ dug well water for domestic purposes. Others didn't use it yet. One lady said that the damaged water tank was given by the CSIAP and it was not replaced yet. The farmer handed it over to the ASC in Northern Province.

In Anuradhapura district, it was identified that farmers received plastic tanks only, not the other accessories to fix the tanks. Therefore, they were unable to use the water tank for rainwater harvesting purposes. However, 40% of them are practicing rainwater harvesting in NCP.

Nobody is practicing rainwater harvesting methods in Monaragala District. It was identified that CSIAP did not provide water tanks to the beneficiaries in Monaragala District. In 18% of them are practicing rainwater harvesting in NWP.

Also, in Northern Province, farmers have not practiced the soil bunds for home gardening activities. But coconut husk was used for the same purpose. They said that that was not needed for them because soil erosion was not identified in their home garden, therefore they are not usually practicing the soil bund for the home garden activities.

According to the questionnaire survey, 64% of them are practicing the soil bunds in Monaragala and 78% of them are practicing the soil bunds in Hambantota District. 64% of them are practicing the soil bund in NWP. 75% of them are practicing the soil bund in NCP.

During the field visit observation and data generation, it was identified that; they are relatively independent in decision-making with regards to garden activity. It includes the use of money to spend their children's education, to buy food, clothes, or other household items, and even the decision to meet friends. Also, women could make independent decisions on food choice as well.

According to the observation and the discussion, it shows that women who had received the training had the freedom to decide over most gardening tasks such as crop choice, planting, and harvesting times, crop management, and input to use.

Source: PulmoddaiASC/ Thennamaravady GND



### **Impact of capacity development programs**

Three sessions of training were received by the farmers related to compost making, CSA practices, and common training related to home gardening in Moneragala District. They said that this program made them realized they can cultivate with available water and can produce organic vegetables for their day-to-day consumption too. In Hambantota, they received 2 sessions of training related to CSA practices. One common training received by the farmers in NWP. Some women in NWP have sold their vegetables during the

COVID-19 period. It was identified that some of them are given higher priority to commercial cultivation. They already engaged in commercial cultivation or value addition work of groundnut.

When this study sees the training in NCP, they have received only 1 training related to compost making. Farmers from the NCP said that they are very happy and interesting to participate in more training programs. They have requested training on plant nursery management too.

### **Accessing finance for home gardening**

Interestingly, this highlights that how women are raising finances to support their work. Women are saving money via producer society as a Seettu system in Nawagattegama ASC even in Kurunegala and Moneragala district too. One woman from NWP said that they are collecting Rs.500 per month and they are giving the loan through the producer society and using that money to expand the home gardens and purchase the agricultural equipment.

For example, they have used this money for good construction, brought a set of sprinkler systems, brought wheelbarrow, and hose pipes in Ambanpola ASC division.

### **Control over the resources:**

CSIAP provided the input as 100% free of charge. Therefore, they may not purchase the seeds and other inputs. But sometimes due to the long distance between the market and the household and not proper road infrastructure, they wanted to depend on their husbands, sons, brothers or neighbours to prepare the land and sell the product in the market.

Self-seed production for next season is already done which are luffa, ladies finger, long beans, brinjal, chilli, wing beans, and tomato. One lady said that she is doing the HG on a large scale using the self-produced seeds which were initially given to her by the CSIAP.

In Northern Province, 94% of the farmers stored seeds for the next cultivation. In Monaragala District 92% of women stored seeds for the next season. In Hambantota, 89% of them stored the seeds for the next season of home gardening activities.

In Northern Province, 96% of farmers said that they got a good yield from the home garden. 100% organic vegetable consumption, interesting to do the home gardening activities, polythene grow-bags help them use minimum water for the cultivation that is the advantage. Ability to continue home gardening even in the future with self-seed production.

In Northern Province, most of the beneficiaries said that they are using vegetables in all three meals. Before they started the home gardening program they consumed a minimum of one vegetable for lunch, not for breakfast or dinner. Usually, they cooked Pittu with Sambol. Nowadays it changed to cooking manioc and boil vegetables in the morning.

All the provinces, women said that these days children are not going to school due to the COVID 19 pandemic, they are staying at home. Therefore, they are happily eating vegetables in their three meals and minimum of two or three vegetables for lunch.

In Eastern province, the household life standard of 10% of beneficiaries has improved due to the CSNSHG activity; before the implementation of them they were having capacity, land and water

but they did not have enough inputs to do farming. After the implementation of the HG activity, they successfully utilized the chance and are now actively involved in household income activities.



Vathsala Priyadarshani's home garden in Padavisripura ASC Division

She has 5 children. The family income depends only on agricultural activities. She is now cultivating chilli, brinjal, manioc, groundnut and black gram in a 2-acre land. She has expanded the home garden into 2-acres land. She said that neighbors also cultivate home gardens as she shared seeds with them.

### Control of the use of income:

CSNSHG Program: Coverage and Investment (2020-21)

Sl No:	Province	No. of Home Gardens or Families	Total Area under Home Gardens (ha)	Investment / Home Garden (SLR)	Total Investment on Home Gardens (mil SLR)
1	Northern Province	400	40	18,600	7.44
2	North Central Province	820	83	18,600	15.25
3	North Western Province	135	14	18,600	1.70
4	Eastern Province	165	17	18,600	3.07
5	Uva Province	425	43	12,600	7.91
6	Southern Province	750	76	18,600	13.95
<b>All Provinces (Project Area)</b>		2695	273	17,600	49.32

Note: (1) Each Home Garden covers roughly about 0.25 ac of homestead area of beneficiary family.

(2) Expenditure covers only project contributions (seeds, plants, and tools & equipment). It does not cover other projects costs such as training and other expenses by beneficiaries.

The control over the income solely by women or jointly with men, here the income means income from the home garden. When we see the yield and consumption, in Northern Province, 90% of the beneficiaries are receiving the vegetables from their home gardens. 10% of beneficiaries did

not receive the benefits yet, due to the Puravi cyclone. Home gardens were fully or partially damaged. After that, they have collected the seeds and continuing the home gardening.

In Moneragala District, 92% of them are getting the vegetables from their home gardens and 45% of them are using the vegetables for their consumption. 28% of them sold the vegetables to the neighbours/ shops/ markets. And 27% of them are sharing the vegetable once a week with their relatives/neighbours.

In Hambantota District, 54% of them are using the vegetables for their consumption, 20% of them are sold to nearby shops or to neighbours. 26% of them are sharing the vegetables with their neighbours or relatives.

100% of them are getting the benefits from the HG and 46% of them using the vegetables for their consumption from their home garden in NWP. 28% of them are selling the vegetables to their market. 26% of them are sharing the vegetables with their relatives.

85% of them are harvesting the vegetable from their home garden and 53% of them are using the vegetable in their consumption. 38% of them are selling the vegetable in NCP. 9% of them are sharing the vegetables with their relatives and neighbours.

#### CSNSHG Output: Use Pattern, Income, and Saving (2020-21)

Sl No:	Province	% Of Families Reported Home Garden Output			Avg. Income from Home Garden / Family (SLR)	Avg. Income Saved from Home Garden / Family (SLR)	% Of Families	
		Consumed by Family	Shared with Neighbors/ Relatives	Sold in Local Area / Market			Reported Saving in Food Costs	Expected to Continue Home Garden
1	Northern Provinces	44	28	28	15,600	5,600	57	94
2	North Central Province	53	9	38	19,000	6,000	29	85
3	North Western Province	46	26	28	20,000	6,000	34	100
4	Eastern Province	50	19	32	17,500	4,800	33	100
5	Uva Province	45	28	28	14,803	4,000	36	93
6	Southern Province	54	20	27	14,000	2,000	22	89

<b>All Provinces (Project Area)</b>	48	22	30	16,817	4,733	33	90
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Note: (1) Since families reported multiple-use, the use of pattern of CSNSHG output reported above was recalculated using:

In Northern Province, 44% of beneficiaries are using the vegetable only for their food consumption. Beneficiaries who are receiving the vegetables, 28% of them are selling the vegetables to nearby shops or markets weekly while 28% of beneficiaries are sharing the vegetables with neighborhood or relatives. Beneficiaries who are selling the vegetables to shops or markets said that they are saving an averagely of Rs.1500 in their saving banks and others said that expenditure for the purchasing of vegetables was fully or partially reduced when compared with the past.

In Monaragala, the monthly average income was Rs.14,803 from the home garden. 36% of them are saving money in their accounts. They said that for more than 3 months they did not go to the market to buy the vegetable.

In Hambantota, their average income is Rs.14,000 per month from their home garden benefits. 22% of them are saving money in the bank.

In Northern Province, one beneficiary said that she is saving money in the National Saving Bank through the nearby sub-post office. Others said that they must go to the bank far away from their residences. Also, 57% of women said that they mainly used this income for their children's educational purposes (buying internet recharge cards for Zoom facility, tuition fees, buying exercise books etc). 90% of beneficiaries said that their day-to-day expenses were reduced by Rs.5,600 per month. During the COVID 19 pandemic situation, they were able to get the vegetables from their home gardening activities.

In Northern Province, 94% of beneficiaries said that they will continue the home gardening activities for the coming season. 6% of beneficiaries said that they were unable to continue the home gardening activities due to the daughter's medical problem and other personal reasons.

In Monaragala District, 93% of them like to continue home gardening. The rest of them do not have an idea to continue the home gardening due to the self-enterpriser/ workload. In Southern Province, 89% of them like to continue the home garden program, others like to continue but the problem is water scarcity for the home gardening.

In-kind income from the home garden was more important than cash income as conformed by the beneficiaries. Women expressed that their home gardens allowed them to provide their household with more and better-quality food, and lessened their dependency on men to purchase food from the market. Women said that they normally had to wait for whatever food their husbands would bring home, therefore, the more productive home gardens made food more readily available whenever there was a need for it. This allowed them to serve vegetables more regularly, thereby diversifying the household diet. The women mentioned that they did not have to ask their husbands

to buy vegetables, they could occasionally ask them to buy other foods such as fish or meat, further contributing to dietary diversity.

In Southern Province, People buy potatoes and fish at the market, not the vegetable nowadays. Some of them are saving money in their producer society. Provided a file to maintain the yield and other details regarding their home garden

In cases where women themselves sold the product; it was mostly to neighbors. Although the income from home gardening was small, the effect on income saved from not having to buy vegetables was more important. Since the purpose of home gardening is to improve household nutrition, selling was not the main goal of the project and can be considered as an added benefit. After this home gardening activity, women said that they insisted to keep money in their possession.

In Eastern province, one of the beneficiaries who are from Pankulam ASC division and woman-headed, her husband, and a child is disabled. She said the home garden activity was very helpful to fulfil her family expenditure. In Eastern Province, 20% of women elder beneficiaries said that home garden income is very helpful to fulfil their own needs and medical purposes without depending on the children and relatives.

Leadership in the community:

In general, women have become more aware of the importance of vitamins and nutrition for family health. Some women said that they learned from their husbands how to prepare better planting beds and how to deal with certain insects and pests. However, with the guidance of their husband/neighbor, women prepare these organic pesticides to liquate. The experience made women more supportive of men.

Beneficiaries said that the positive impact from the fact that women made an increased economic contribution to the household, which was recognized by their children. It helps to gain more respect, enhance social status and decision-making power.

Other people in the village also become interested after seeing the improved home gardening. Women's membership in the Producer Society and speaking in public comfortably. It seems that there is gradually increased the women voice on decision making in the area which was identified through the study. AIs and CSIAP staff provide technical support over the phone conversation if needed.

**Time:**

Allocation of time to productive and domestic tasks and satisfaction with the time available for leisure activity. Women said that they can do all kinds of garden work themselves, but men would usually offer to help with certain strenuous tasks such as preparing planting beds, making the drains, and erecting fences. However, women did most of the other activities such as harvesting, watering, planting, and weeding.

Women said that they spent the income mostly on food and school items for their children. Some were thinking about planting fruit trees or keeping livestock as a business; others were considering off-farm activities such as knitting and food processing/ value addition/ small scale marketing/ shops to be an entrepreneur.

### **Impacts of CSNSHGP during the COVID 19 pandemic**

#### **(Achievements, Opportunities, & Weaknesses)**

- Children are involved in the home gardening process with their parents. Therefore, the home garden activity is simply adopted by young children.
- Food security was ensured during the pandemic; the whole country was locked and they managed with their home garden product.
- Encourages females through Producer Society farmer organization and promote self-sufficient employment.
- Females are encouraged and move towards the self-employment that has been carried out through PS.
- Fulfilled the food and nutrition requirements of the family to some extent.
- Improved food consumption pattern of the family.
- Developed mental and physical stability of the family members during the pandemic.
- Increased land productivity and maintain environmental security.
- Decorated home garden through decoration process via food crops.
- Social and economic development due to project implementation and the way of empowering citizens.
- Most of them said that the community spread of COVID 19 to a various extent was reduced, most of them are not going to the vegetable market to buy the vegetable more than 06 months from the date of the completion of the survey.
- Uplift the life standard of women.
- Increased the entire production and productivity.
- Developed the land utilizing efficiency.
- Organic farming was also promoted.
- This program was a step to increase the cultivation of abandoned land within the household promises.
- Create female entrepreneurs to get a female contribution to household income generation.
- It was able to strengthen females and also will be able to improve the nutritional security of the present food pattern. The females were also economically empowered through PS as female farmers PS/ FO.
- It declined to increasing the food production in the country as well as generating a prosperous farmer community. The contribution of farmers who proceed hardly to achieved prosperous agro-economic with the creation of food security should always be appreciated.
- Home gardening activity expects to work towards sustainable agriculture in the years 2020 and 2021 with the contribution of the farming community.

- Farmers are expecting to introduce a new variety of crops and enhance the productivity of major crops.
- This program promotes and encourages the production and use of organic fertilizer.

### Obstacles and challenges:

Flood, drought, and crop damage by the wild animals including elephants, monkeys, peacocks, pigs, etc. Damage of live fences by the wild animals, lack of training program conducted in some provinces, especially they requested training on how to cultivate, harvest, and post-harvesting/ value addition for the ginger and turmeric. If they sell the vegetables in the nearby shop they can sell for a very low price if the road condition is good, they are able to go to the nearby market and sell at better prices. If the road condition will be improved, it will be easy for them to reach markets and travel safely for pregnant women and others. They need the training on rainwater harvesting techniques no one did not point out that they have received the training on rainwater harvesting.

Few of them said that they are facing the workload because of the home gardening activities, women's activity per day was identified during the field visit as wake-up, prepare breakfast, visit the home garden, provide food for kids and husband, monitor the Zoom classes for kids, do household chores, prepare lunch, provide lunch to kids and husband, eat lunch, visit poultry, monitor daughter while studying, feed their dinner, having their dinner and go to sleep. They said that they are sleeping approximately 5 hours per day.

Monitoring children while they are studying appeared to be a common task for women, as they wanted to ensure their children received a better education than they had received. None of them hired private tutors for children's study. Children are participating in the common classes over Zoom. Some of the women used income from gardening to pay for their children's education. For example: buy Internet recharge cards, mobile phones, online tuition fees, etc.

### SWOT Analysis

#### Strength:

- (i) Farmers received the seeds and other agricultural inputs free of charge from the CSIAP. They said that it was a motivation for them to engage in home gardening. Even their school-going children also interestingly engage in home garden activities considering it as their new hobby.
- (ii) Farmers said that after this program, ARPAs often visit the home garden in the Monaragala District.
- (iii) The project has conducted training on CSA practices especially compost making.
- (iv) Farmers are cultivating crops in their home gardens in both seasons and they have produced seeds themselves for future cultivation
- (v) Practicing the CSA activities in their home gardening activities, for an example; compost making, organic pest control methods, mulching, soil bunds etc. Especially manufacturing compost is promoted

- (vi) Organic pest control method is increased with available materials within their home garden.
- (vii) At least, to some extent of soil bunds that are made, helped to minimize soil erosion.
- (viii) Maybe due to the CSA practices, the yield was increased and the average yield of 30 - 40Kg harvested.
- (ix) Home garden cultivation extended from ¼ ac to 1/2 acre. In some cases, it was identified that it extended from 1 to 2 acres
- (x) Ensured food security, family income during the COVID 19 pandemic in the hotspot area.
- (xi) Some of them sold the vegetables to nearby boutiques for about Rs. 15,000 per week and their income was increased daily and family expenses were decreased.
- (xii) Due to the home gardening activities, social integration, social coherence has increased because of the meeting at the PS at least once a month, going to the market, sharing vegetable with relatives/ friends and neighbors.
- (xiii) Remaining Seettu system via Producer Society in NWP and NCP was identified.
- (xiv) Expecting more training and new technology and value addition and market linkages in Monaragala District.

#### Weakness:

- (i) Some farmers have not used inputs due to economic constraints; for example, rainwater harvesting, no gutters were built to collect water.
- (ii) Some of the materials are provided without training or awareness therefore, farmers don't know how to use those materials.
- (iii) FAIL/ Delay to provide some of the equipment which was proposed in the Sub-project proposal.
- (iv) Some procedures of selecting beneficiaries were not appropriate, as it was dominated by field officers. The project has given inputs via producer society, but PS has not properly distributed them.
- (v) CSA practices are not followed properly due to lack of training or understanding.
- (vi) In some cases, CSIAP has not applied the beneficiary selection criteria which was developed by the PMU.
- (vii) Lack of visits to the backward areas by the field staff.
- (viii) The 500L water tank was identified as not enough to make rainwater collection but farmers use pipe-borne drinking water for the home garden.
- (ix) AIs have not visited the home garden in Moneragala. They were unable to get advice regarding the pest and disease to the home garden in Moneragala.
- (x) Did not provide the water tank by the project to the managerial people.

(xi) Did not receive some input from the beneficiaries, it is in ASC divisions due to the transport problem.

## Opportunities

- (i) The home gardening culture was created not only among women but also among school-going children.
- (ii) CSA practices are spread in the villages.
- (iii) Children are involving in harvesting the vegetables and in growing vegetables.
- (iv) The cost of living could reduce and increase the savings as a result of the income from the home garden.
- (v) School leavers (especially girls) are involved in work and additional income could be received
- (vi) Stress caused by the pandemic could be reduced due to new hobby, some of them said that they are posting photographs of them harvesting their cultivation on their social media and getting appreciations and identity, they said that it was a great motivation for them
- (vii) Unproductive land around the house became productive due to this program
- (viii) Local material such as cow dung were used for productive purposes.
- (ix) Food security and nutritional food consumption by the family.
- (x) Organic food consumption by the family members.
- (xi) Vegetable consumption increases.
- (xii) The quality of the organic farm production has been realized by the farming community
- (xiii) Fresh vegetable consumption increases.
- (xiv) Using the money to expand the home gardens and their children educational purposes.
- (xv) Most of them are using the income of the home garden for their children's educational purposes.
- (xvi) Saving habits were increased via producer society.

## Threats

- (i) Some farmers have already abandoned home gardens due to water scarcity.
- (ii) Farmers facing HEC in some areas.
- (iii) Loss of yield due to wild animal attack.
- (iv) Lack of field visit monitoring to the household by the specialists.
- (v) The sustainability of the program is uncertain due to a lack of monitoring.

## Recommendation

- (i) Beneficiary selection criteria should be applied during the selection process, it should be filled and maintained in the database.
- (ii) Producer Society should be formed before supplying inputs.
- (iii) During the next batch of beneficiaries, supply of inputs in time, identification of needy beneficiaries, proper capacity building, strengthening Producer Societies, and providing the Field Note for documenting the yield and income details will be rectified.
- (iv) Better to form a SAC to monitor whether all inputs were delivered to the beneficiaries or keeping with PS/ ASC Division.
- (v) The quality of inputs should be checked before delivery.
- (vi) Marketing opportunities should be arranged at least via PS.
- (vii) Training should be conducted regards to CSA Practices, the use of CSA technologies, and Value addition of products.
- (viii) Some % of beneficiaries should be made entrepreneurs.
- (ix) Quality seeds should be provided.
- (x) Field visit monitoring should be done by the project staff.
- (xi) Specialists should visit the home garden fields at least under a random monitoring process.
- (xii) The best home garden should be awarded at ASC level for a motivational purpose.
- (xiii) 500L plastic water tank is not enough to collect water, better to promote the concrete water tank. The use of 500L plastic tanks will be analyzed and suitable tanks will be provided for the provision of drip irrigation facilities.
- (xiv) Provision of 3 - 4 numbers of 98 cell Portray will be distributed to the beneficiaries for raising seedling prior to the Monsoon season. Proper capacity building will be given for raising invigorated seedling production techniques in Portray.
- (xv) Provision of a small hand-operated sprayer and 5Kg capacity plastic weighing scale will be provided for quantifying the yield obtained from the home garden, along with the filed note for recording their yield and income details, etc.
- (xvi) Requested training should be conducted in all provinces.
- (xvii) Meetings/ discussions should be held with beneficiaries at least once in two months to identify their challenges and obstacles.
- (xviii) A separate team should be done a field visit as an audit to check the actual situation of the home garden program.
- (xix) Initially give a file or notebook to maintain the record of product, expenditure, and saving from the HG.
- (xx) Better to promote the home garden program even at the school level. Because it was identified that most of the school-going children were involved in home gardening activities with their mothers as a hobby.
- (xxi) The beneficiaries will be encouraged to plant Ginger, Turmeric, and other location-specific herbal plants around the home garden.
- (xxii) Encourage to apply the COVID 19 safety measures whenever apply.
- (xxiii) Most of the ladies from the North-Western Province said that they prefer to cultivate mushrooms.

- (xxiv) Empower communities (including households, families, women and men) toward more active participation in home garden activities.
- (xxv) Promote gender equality and environmental sustainability.
- (xxvi) Promoting behavioral change in communication.
- (xxvii) Ensure the Gender Based violence are recorded in the GRC.
- (xxviii) Pay close attention to how the project affects women and courage gender equality.
- (xxix) Recognize nutrition education and behavior change in communications as key elements of project design.

### Gender-Based Violence

Farmers are not ready to talk about gender-based violence-related information. Therefore, Gender-based violence-related issues were not recorded during the survey even though it was asked indirectly. Importantly 1<sup>st</sup> set of questionnaire surveys did not consist of GBV related questions. There it was unable to identify the actual situation in other provinces. But the second set of questionnaire surveys included the GBV related questions indirectly.

### Conclusion

Mainly they are using the well water for the home gardening activity. The note highlights those good practices for strengthening women's access to secure land rights and agricultural entitlements. Women's economic empowerment and social inclusion through the CSNSHGP in the hotspot area. Women in households who had received the intervention had slightly greater social mobility as they visited friends and went to shops more often.

According to our observation, homestead vegetable production fitted with women's livelihood strategies as it required very little land and cash, women could flexibly be allocated time to the home gardening and did not need to move beyond the homestead. They also provided qualitative evidence that sharing of home-produced vegetables helped to establish a feeling of solidarity among women.

This study has observed that women are clearly in control of garden management. They explained that women have an interest in terms of food security and health for their families and natural resources conservation.

Sustainable intensification of vegetable production in their home gardening. Organic vegetable production and consumption, CSA practices, integrated farming system, compost making by using the household wastages.

Finally, 17 SDG directly or indirectly connected with this program too; such as elimination of hunger, ensuring food security and promoting sustainable agriculture, empowering women population through promoting women agro entrepreneurship, the establishment of sustainable consumption pattern, preservation of ecological system, mitigating the impact caused by climate change sustainable water management.

### Case Study

Mrs. R.V Kumari – Ambanpola ASC in Kurunegala District,

She said that after the marriage she came to Ambanpola, Kurunegala. She didn't have any experience in home gardening including how to prepare the soil for cultivation, but her husband helps and educates her on how to do gardening.

One year later, she became a successful in-home gardener and she was selected as the best home gardener in Ambanpola ASC from the "Api Wawamu Rata Nagamu" government program. But she didn't receive an award, even she did not receive any equipment from the department to develop her home garden from that program. It made her disappointed at that time.

Now she said that she is very happy about CSIAP program because CSIAP CSNSHG program was given 10 packs of vegetable seeds, Fruit plants, 100 biodegradable grow bags, Containing fork, spade, secateurs, watering can, and Poly mulching mats materials as free of charge. This is the first time she received this much agricultural equipment she said that it more and more encouraged her to make commitments towards home gardening.

She has made her nursery to grow crops in pots. Making compost and organic pesticides. She is very happy to continue HG work with a lot of self-satisfaction.

One lady from the Northern Province said she is from a woman-headed family whose husband died due to the accident. She has 3 children 1<sup>st</sup> child passed the A/L exam and she is waiting to enter the university.

She said that during the COVID 19 pandemic, 2 of her children did not go to school. She said that her elder daughter is very much interested in growing spinach varieties Pasali Keerai (Spinach), Ponnanganni Keerai, Mulai Keerai (Amaranthus Polygonoides). She sells ladies fingers 3 times a week. She brought some seeds from her relatives in Vavuniya. The elder daughter said that they can get some money 4 times a week by selling spinach which gives them motivation. She said that she is saving money in her bank account minimum of Rs. 1,500 twice a week for the last 3 months.

Another lady said that her husband taught her how to learn agriculture techniques on YouTube. Now she is watching YouTube Videos related to home garden and decoration and also, she smiled and said that she is cooking a variety of vegetable foods by watching YouTube videos in Tamil.

Most importantly she said that she is watching CSA home gardening in India.

## List of Participants in the Field Visit

Provinces	Names	Designation
North Central Province	Sharmila Shanmuganathen	Gender Development Officer -CSIAP - PMU
	M. Udula J. Sedera	Environmental Officer – CSIAP -PMU
	Punya Gunasekera	Gender Development Officer
	Shantha Dissanayake	Environmental Safeguard Officer
North Western Province	Sharmila Shanmuganathen	Gender Development Officer -CSIAP - PMU
	M. Udula J. Sedera	Environmental Officer – CSIAP -PMU
	Senarathne Banneheka	Social Safeguard Officer
	Champika W. Abewardana	Gender Development Officer
	Punya Gunasekera	Gender Development Officer
	Shantha Dissanayake	Environmental Safeguard Officer
Uva Province	Sharmila Shanmuganathen	Gender Development Officer -CSIAP - PMU
	M. Udula J. Sedera	Environmental Officer – CSIAP -PMU
	Devika Wasala	Social Safeguard Officer
	Anura Kumara	Gender Development Officer
	Wimalaveera Adhikari	Environmental Safeguard Officer
Southern Province	Dr. Janaka Jayawardana	Environmental & Social Safeguard Specialist – CSIAP -PMU
	Chamlie Jayalath	Social Safeguard Officer
	Yasitha Kumanayaka	Environmental Safeguard Officer
	M. Udula J. Sedera	Environmental Officer – CSIAP -PMU
Eastern Province	T Sekeran	Social Safeguard Officer
	T. D. Kayalvili	Gender Development Officer
	Raviraj Amirthalingam	Environmental Safeguard Officer
Northern Province	Kesiga Sampasivam	Environmental Safeguard Officer
	K.Kapilan	Social Safeguard Officer

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