

GRAMA SEVA SANGAM - (GSS)

Annual Report 2021 - 23

“Investments in Agriculture are the best weapons against hunger and poverty and they have made life better for billions of people”



No. 982, Neem House, Kilikkudi Village & Post,
Illuppur Taluk, Pudukkottai District - 622 102. Tamil Nadu.

LOCATION MAP



Pudukkottai District

Amburpatti & Avvayarpatti



GRAMA SEVA SANGAM (GSS) ANNUAL REPORT 2021 - 23

We feel proud to submit the Annual report for the year of 2021-23. Several stake holders rendered their helping hands in materializing our objectives we envisaged. They extended their support in terms of financial assistance, technical support, creating linkages, advocacy and lobbying. Here below we give the report on special reference to how the activities created impact. Integrated watershed management and Climate proofing is our main activity. It includes women development, reduce migration, reduce landless labourers, increase addition income, create aware about new technologies and increase standard of living of people. We have covered two watershed covers the villages such as Sengalakudi, Madayanipatti, Avoor, S.Pudhupatti, N.Pudhupatti, Othaveedu, Orandakudi, Seethapatti, Samiooranipatti and Melapatti covering an area of 2188.655ha. Total families are 766, total population is 3724, Male -2020, Female -1704. In Avvaiyarpatti watershed villages covered are Neerpalani, Karapattu, Nariyapatti, Vemmani, Chinnamoolipatti, Periamoolipatti and Mallampatti. Total area is 2172.805ha, Total families 1121, Total population 4229, (Male -2161, Female- 2068). In both these watershed areas integrated watershed management activities were taken up. 3226 Men and 2154 women were benefited through this project during this year and 2614.25 ha was brought in to watershed management and climate proofing activity so as to bring forth benefits to the farming community.

In this financial year of 2021-22 we are sanctioned with two new climate proofing projects based on criteria of NABARD, namely AMBURPATTI and AVVAIYARPATTI in viralimalai block of Pudukkottai District.

S.NO	WATERSHED AREA	SANCTIONED AMOUNT (Rs.)
1.	AMBURPATTI	58,76,700
2.	AVVAIYARPATTI	58,31,870
	TOTAL	1,17,08,570

As per the guidelines, GSS as a Project Facilitating Agency (PFA) has kept all the following programmes:

1. GSS as a PFA forming the local village community and planning with them by conducting number of meeting with the VWC member such as farmers, youth and Women self help groups and enabling their full cooperation and participation from the selected villages - AMBURPATTI AND Avvaiyarpatti.
2. The local issues and needs of the watershed areas are discussed deeply during the initial meeting and subsequent meetings.
3. The watershed community activated by the PFA and both of them understood the issues and carried out the project activities.

Main Objectives :

- To treat the whole of watershed so as to adapt the climate change by the farmers.
- To ensure people's spontaneous participation free from political, religious, caste / community bias and their contribution for treatment measures and future maintenance.
- To promote their skills through need based trainings, awareness and exposures to induce a new mindset towards a sustainable development.

Specially

- a) To prevent land degradation by adoption of a multi-disciplinary integrated approach in the catchments areas
- b) To improve the land capability and moisture regime in the watershed
- c) To promote land use to match land capability
- d) To prevent soil loss from the catchments to reduce siltation of water bodies and reduction in slope that would ultimately reduce the favorable slopes for rain water harvest.
- e) To involve the beneficiaries towards the sustainable management of catchments area
- f) To upgrade the skills in planning and execution of soil and water conservation

For GSS - NABARD KFW SOIL PROJECT we conducted Participatory Rural Appraisal (PRA) in both AMBURPATTI & AVVAIYARPATTI areas under NABARD DDM supervision



Activities Completed by Organization in 2021 - 23

AREA TREATMENT / SWC STRUCTURES

1. Farmpond :

Amburpatti and Avvaiyarpatti area are domestic to people who consider agriculture as their most imperative provision of income. Since rainfed agriculture takes place in the region, it is necessary to store water during the rainy season. Although the rainfall rate here is average, they do not know the strategy of properly storing and using it. From our organization we dug 7 farm ponds (1 farm pond/beneficiary) for 4275 cum). It extended their cultivated area and their yield. Moreover, farmers are using these ponds as fish culture to earn additional income along with agriculture. Awareness has been created among farmers in nearby villages and they themselves plan to implement this philosophy in their own agricultural area.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	7	214326	40824	255150
2	AVVAIYARPATTI	10	312984	59616	372600



2. Land levelling :

Most of the land in amburpatti and avvaiyarpatti area was found barren. Most of the farmers were unable to level the land and kept it fallow. The selected farmers from our organization levelled the land and the land was prepared for farming. By this the barren land was converted into agriculture land. With those lands they earn income in all three seasons.

S.NO	WATERSHED AREA	AREA	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	5.95 HA	13388	4463	17850
2	AVVAIYARPATTI	15 HA	33750	11250	45000



3. Micro Irrigation (Drip & Sprinkler Irrigation) :

Farmers of amburpatti and avvaiyarpatti practice open irrigation for all crops, resulting in large amounts of water being evaporated and wasted. Many improved technologies have been introduced to irrigate without wasting water. One of the most important ones is Drip irrigation and Sprinkler irrigation. Water is saved by these only apply water to the places where it is needed. Drip and sprinkler irrigation systems were provided to the farmers from our organization and installed in the farmers' field. This not only reduced their water requirement but also increased their yield. Knowing its use other farmers have also started adopting this technology.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1.	AMBURPATTI				
	Drip Irrigation	2	105000	35000	140000
	Sprinkler Irrigation	10	165000	55000	220000
2.	AVVAIYARPATTI				
	Drip Irrigation	2	105000	35000	140000
	Sprinkler Irrigation	10	165000	55000	220000



4. Deepening of Tanks :

There are 8 tanks for irrigation in both the watersheds. Since desilting work has not been undertaken for many years, the capacity to store water in the tanks is decreasing. This year, these 8 tanks will be deepened to store more water for irrigation purposes. So, despite deficient rainfall this year, 2,500 farmers benefited from this water and got good yields.

The people of both these regions depend only on water tanks for drinking water. During the rainy season, rainwater is stored and used throughout the year. In order to provide adequate drinking water to the people, 8 tanks were deepened. With this, drinking water was supplied throughout the year.

S.NO	WATERSHED AREA	AREA	GRANT	SHRAMADHAN	TOTAL AMOUNT
1.	AMBURPATTI (4 NOS)	10000 CUM	362880	69120	432000
2.	AVVAIYARPATTI (4 NOS)	5800 CUM	263088	50112	313200



SOIL FERTILITY & PRODUCTIVITY ENHANCEMENT MEASURES

5. Soil Testing & Soil Health Cards :

We collected 250 soil samples for each watershed and tested that in the soil testing laboratory and gave the results of soil testing to the farmers. This helps farmers to identify the exact need of their land and reduce the use of unnecessary fertilizers.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1.	AMBURPATTI	250 NOS	75000	-	75000
2.	AVVAIYARPATTI	250 NOS	75000	-	75000



6. Compost Pit :

The people of Amburpatti and Avvaiyarpatti areas, despite being farmers and cattle rearers, are unable to use the waste properly. In both the watersheds, 20 compost pits were dug. Through this, farmers systematically collect agricultural wastes and animal waste, convert it into manure, use it for agriculture, and increase yields.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1.	AMBURPATTI	97.2 CUM (15 NOS)	4409	3561	7970
2.	AVVAIYARPATTI	377.8 CUM (5 NOS)	17136	13841	30977



7. Vermicompost Demo Unit :

We have set up 10 vermicompost demo units in each watershed. We guided them to produce vermicompost on their own. After using it for the first time, seeing the benefits it brings to the land, they started producing it and using it regularly. Moreover, by explaining to many people about the mode of production and its benefits, they also educate other farmers.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1.	AMBURPATTI	10	86416	2562	88978
2.	AVVAIYARPATTI	10	86418	2563	88980



8. Application of Vermicompost :

Avvaiyarpatti and Amburpatti watershed area have good fertile soil. There is no need to put high amount of fertilizer for yield. But the farmers of those villages put high amount of fertilizers to get high and quick yield. So, the soil gets highly polluted and needs reclamation. Vermicompost is an organic fertilizer which was naturally decomposed by earth worms. We gave individual beneficiaries a count of vermicompost bags based on their land availability (1t /ha). It regulates the growth of the crop better than before. It reduces amount of basal dose fertilizer application and reduce weed population compare to before. It reduces amount and cost of basal dose application Rs.2000/acre. It slightly increases the yield (1bag/acre). It increases soil fertility, so the production capacity automatically increases. After the success of vermicompost farmers believe that organic fertilizers and organic methods can increase the yield and income.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1.	AMBURPATTI	50 HA	242000	14000	256000
2.	AVVAIYARPATTI	50 HA	242000	14000	256000



9. Azolla Demo Unit :

The farmers of Amburpatti watershed area only use inorganic fertilizers for fields and feed ordinary animal feed to their livestock. Azolla is used as organic feed for cattle and poultry. It increases milk yield capacity of milch animal and meat capacity of poultry. We gave artificial azolla bag set up to individual beneficiary and fit the bag in suitable place. Because it requires both sunlight and shade in limited level. And also, we provide azolla seed to individual beneficiary. In the field level, it gives N (nitrogen) content to soil. It reduces level of urea application to soil. In 25 to 35 days azolla can easily fix enough nitrogen for a 4 to 6 ton/ha rice crop during the rainy season, or a 5 to 8 ton/ha crop under irrigation during the dry season. Azolla also contributes to maintaining soil fertility, by providing nutrient-rich humus through its decomposition. It reduces fertilizer cost Rs.120/acre. It reduces weed growth in field. So, it also reduces weedicide/hand weeding cost Rs. 1500/acre. In poultry feed, it increases milk yield and reduce feed cost Rs. 40/day.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1.	AMBURPATTI	30 NOS	108997	9332	118329
2.	AVVAIYARPATTI	30 NOS	108997	9332	118329



10. Biofertilizer :

Avvaiyarpatti watershed area has a good fertile soil. There is no need to put high amount of fertilizer for yield. But the farmers of those villages put high amount of fertilizers to get high and quick yield. So, the soil has highly polluted and needed reclamation. And also they put high quantity of seed in cultivation but did not get expected plant population. So they did not get expected yield also. We analysis the reason behind reduction of plant population. Seed borne disease and seed infected pests are the important reason for this issue. We recommended biofertilizer for those farmers. At first, we gave training for avvaiyarpatti and amburpatti farmers about biofertilizer and how to use it. We gave Azospirillum, Phosphobacteria, Azotobacter, Rhizobium and VAM (2kg/ha) to a farmer.They got higher yield than last cultivation upto 3 bags/acre.It increases income upto 10,000/acre.It reduces unwanted pesticide and insecticide use. So, it reduces Rs.500/acre. It is ecofriendly, increase fertility and microorganism activity.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1.	AMBURPATTI	100 HA	150000	100000	250000
2.	AVVAIYARPATTI	100 HA	150000	100000	100000



11. Intercropping - Blackgram :

Farmers from Amburpatti, Avvaiyarpatti and other areas took up only single crop cultivation. Depending on only one crop in some seasons can be very dangerous. We advised the farmers to grow black gram as an intercrop in their main crop. This reduces their risk of the main crop. This was the new practice in that area. So, we supported the purchase of inputs and land practices. It works and through this, farmers get additional income. And they follow this practice regularly.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	30 HA	60000	30000	90000
2	AVVAIYARPATTI	30 HA	60000	30000	90000



12. Agroforestry :

Most of the lands in Amburpatti and Avvaiyarpatti areas were lying fallow. They are not suitable for crop cultivation as they are less fertile. So we decided to suggest an alternative land use method for those farmers. Under this, we distributed 50 redwood , teak and vengai saplings to 20 farmers in each watershed. They are wood value trees. This reduces the barren terrain and increases their future monetary value.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	20 (1000 NOS)	33640	5880	39520
2	AVVAIYARPATTI	20 (1000 NOS)	33640	5880	39520



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13. Yellow Sticky Trap :

Yellow sticky trap was one of the implements in cultural method of Integrated Pest Management. It is a physical method to kill pests in low cost. We provided 5 numbers of yellow sticky traps per acre and guide farmers to set in their field. Yellow colour attracts pest and insects and stick on it. It reduces unnecessary pesticide cost for farmers.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	1000 NOS	50000	10000	60000
2	AVVAIYARPATTI	1000 NOS	50000	10000	60000



14. Kitchen Garden :

In amburpatti and avvaiyarpatti watershed area, people cultivate rice as a major crop in kharif season, Groundnut and black gram in rabi season. A very few farmers only cultivate vegetable crops (single vegetable) in low area. They depend other village farmers and stores for vegetables. We provide 15 quality vegetable seeds and seedlings to each beneficiary. Farmers save money upto Rs.1500/month by growing vegetables in their house. They consume healthy, fresh and organic vegetables. It gives more nutrient and energy than inorganic vegetables. It induces farmers to grow vegetables in large scale.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	100 NOS	20000	20000	40000
2	AVVAIYARPATTI	100 NOS	20000	20000	40000



15. Integrated Farming System :

The farmers of Amburpatti and Avvaiyarpatti are not only farmers but also cattle rearers. In order to sensitise the farmers about the benefits of recycling waste, integrated farming has been set up at the rate of one farmer per watershed. From our organisation a farm pond was dug and a poultry cage was built on top of it. Later, a cowshed was also set up near it and agriculture was done. Fish culture was maintained on the farm. Farm waste was used as fodder for livestock, cattle waste as agricultural input and poultry waste as food for fish. It not only reduces the cost of fodder and agricultural input costs, but also promotes organic farming. Many farmers are trying to adopt integrated farming system after realizing the benefits.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	1 NOS	81750	27250	109000
2	AVVAIYARPATTI	1 NOS	81750	27250	109000



16. Installation of Biogas :

Amburpatti and Avvaiyarpatti watershed area covers 4-5villages. People live in these villages are mostly farmers and earn less than marginal income for their family requirement. In today's busy world cooking with wood (traditional method) is most challenging one. LPG stove becomes one of the important components in each house. As the price of LPG cylinder keeps increasing, they are unable to buy and use it. In this watershed area, 80% of peoples are dependent on agriculture and also, they have 2-3 cows. Cow dung is one of the important renewable energy resources. It is only source to run biogas successfully. We gave training from Mr. Anbuchezihiyan KVIC biogas department. He clearly explained about biogas, its construction and method of use. Before that our PFA staff and technicians visited her house for site selection and selected suitable place for installation. Then we construct KVIC dheenabandhu type of biogas in their house. Also, we issued individual stove and line connection from plant to stove. It has completely saved their LPG cylinder cost for 20 years (Rs.1200/month).It has reduced cattle waste, because it is used as a source for biogas. Wastage from biogas production is being used as biofertilizer for agriculture field.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	11 NOS	422400	30800	453200
2	AVVAIYARPATTI	11 NOS	422400	30800	453200



17. Honey Bee Rearing :

Beekeeping is considered to be the most important emerging technology now. This is because farmers can earn extra income through the production and sale of honey without any investment. It not only improves the standard of life of the farmers but also the standard of life of village women. 50 farmers and women were provided with honey boxes with bees from our organisation. Through this, they produce and sell pure honey and earn an income. This is the new technology introduced by our organization in this watershed area. We hope that this will later become a great identification of this area.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	25 NOS	37500	12500	50000
2	AVVAIYARPATTI	25 NOS	37500	12500	50000



18. Backyard Poultry :

One-third of the population in the Amburpatti and Avvaiyarpatti watershed areas farmers and the rest are wage labourers. They depend on daily wages for their daily needs. In order to improve their livelihood, 150 farmers from our organisation have been provided with 10 chickens. People can earn an income by rearing these chickens and selling eggs.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	60 NOS	72000	24000	96000
2	AVVAIYARPATTI	80 NOS	54000	18000	72000



19. System of Rice Intensification (SRI) :

This is also new technology introduced by our organization in Amburpatti and Avvaiyarpatti areas. Most of the farmers were following same old planting system in paddy. By following SRI method of planting system, the amount of paddy seed, labour wages, irrigation water used, pesticides and other inputs are reduced, increases yield. Our organization helped the farmers from buying seed to harvest. By adopting this method, their yield has increased significantly. Also, the input costs have been reduced to a large extend and the income has increased. So, farmers continued to follow this method.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	20 NOS (20 ACRE)	180000	60000	240000
2	AVVAIYARPATTI	20 NOS (20 ACRE)	180000	60000	240000



MEASURES TO MITIGATE CLIMATE RISKS

20. Automatic Weather Station :

It has been set up so that the people of the region can clearly know the information about the daily weather. Through this, the daily weather information is directly communicated to the farmers through their mobile. Through this, given rain forecast and agricultural information is very useful for farmers.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AVVAIYARPATTI	1 NO	150000	-	150000



21. Crop Insurance :

Every year government provides crop insurance subsidy amount according to the changing weather conditions. For that farmers have to pay premium in advance. Many farmers do not insure their land as they are unable to pay. We selected that farmers and pay their premium amount from our organization. Through this many farmers have benefitted by getting government insurance subsidy.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	70 NOS	84000	-	84000
2	AVVAIYARPATTI	70 NOS	84000	-	84000

22. Solar Lantern :

We provided 25 solar lanterns for amburpatti farmers. It is used by the farmers for field lighting at night, for children to study when there is no electricity and for home use. It is fully charged by sunlight, so it is very useful for farmers.

S.NO	WATERSHED AREA	NO. OF BENEFICIARIES	GRANT	SHRAMADHAN	TOTAL AMOUNT
1	AMBURPATTI	25 NOS	50000	-	50000



Capacity Building and Institutional Strengthening Measures

TRAINING

23. Trainings :

We provided more than 25 trainings for farmers. Each training is conducted with the aim of teaching a new technology to the farmers. More than 50 farmers participated in each training. Most of the farmers use what they have learned in the training in their daily farming.



Honey Bee Training



Fishery Training



Biofertilizer Training



Crop Insurance Training



Poultry Training



Azolla Training



Vermi Compost Training



Coir Making Training



Biogas Training



Organic Farming Training

24. Exposure Visits :

The new technologies that could not be taught in the training were directly visited by the farmers in native place. Farmers directly interacted with the experts in the technology and understood clearly.



KEELAPANAIYUR



NPRC, VAMBAN



**NAVEEN GARDEN
MUSIRI**

WATERSHED LEVEL KNOWLEDGE MANAGEMENT

25. Village Knowledge Centre :

We have set this centre in both amburpatti and avvaiyarpatti area. All information related to agriculture is provided here for free. Everyday new technologies related to agriculture is shared. Patta, Chitta, Xerox copies are available at low cost.

Women Development Programmes and Formation of SHGs:

In the project region, GSS has organised women self-help groups (SHGs). From 15 villages of both watershed areas, 45 self help group members were selected and facilitated with a training on Book keeping and accountancy. The savings and credit system in the SHGs is now managed by these training people. Before the training, A staff was appointed to take care of such accounting work. Now the women group members themselves are taking care of the group and all book keeping and accountancy are carried out by them. As a result, seeing their effective management of the SHGs, the local banks have come forward to offer business loan to the tune of one lakh. The SHG members are now developing as entrepreneurs.

S.NO	WATERSHED AREA	NO. OF GROUPS	TOTAL MEMBERS	TOTAL AMOUNT
1.	AMBURPATTI	24	333	12,45,000
2.	AVVAIYARPATTI	21	319	10,25,000



OTHER WORKS FROM OUR ORGANIZATION

1. Saplings for Schools :

We provided more than 100 agroforestry saplings for both amburpatti and avvaiyarpatti Government higher secondary schools. It will give proper shade for students in future. School headmaster and students thanks us for the saplings and students watering and maintained the saplings properly.



2. Convergence with NPRC, Vamban:

We joined with National Pulse Research Centre and Krishi Vigyan Kendra, Vamban to get government schemes to the farmers of both amburpatti and avvaiyarpatti area. In collaboration with them, various trainings were given to benefit the farmers. Through this, the farmers got to know about various new technologies in agriculture. Livestock, poultry, fish fingerlings and biofertilizers were also provided at free of cost to the most vulnerable people of amburpatti and avvaiyarpatti from KVK, Vamban.



3. Anbil Dharmalingam Agriculture College & Research Centre Students Visit:

ADAC & RC, Trichy students visited our watershed area and visited all our project related works. They learnt all their agriculture practices in practical manner. They interacted with our farmers and cleared their doubts with their subject knowledge and explained them about new technologies. And also students learnt lots of cultural agriculture practices from farmers



If you eat to they thank a Farmer...
*If you eat to they thank a **Farmer...***



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