

25th Annual Report of SEVA 2016-2017

SEVA is registered as NGO under society's registration Act (136/1992). SEVA has been involved in 2 major activities viz. documentation and dissemination of traditional knowledge and grassroots innovations; and conservation of local livestock breeds.

1. Documentation of Innovations

During this year we have documented 304 innovations/practices (herbal practices for human 97, herbal practices for animals-133, agricultural practices 35, agricultural implements 10, mechanical innovations-20, new crop variety 1, and food recipes 8) and submitted to National Innovation Foundation, Ahmadabad (NIF).



Tapioca stem grinder (Agricultural waste grinder) by Jayaprakash, Rasipuram

We have collected plants samples listed by National Innovation Foundation for verification and testing. We have devoted 2 months for this purpose by collecting samples from various districts with the help of NIF team during June - August, 2016. We executed signing the agreement with National Biodiversity Authority / National Innovation Foundation with the selected healers in different districts.

1. State level Workshop with Innovators :

We have organized state level workshop with innovators on 7-8-2016 at Puliangudi village, Tirunelveli district. There was participation of 37 members from different districts. Display cum demonstrations of innovations viz. solar cycle, solar pump, weeder, crop fumigation tool, herbal plants, seedlings have been made and demonstrated.



Visit to Mr. Anthonisamy farm where he developed innovations in sugarcane cultivation, citrus (lemon) cultivation, agro forestry models has been arranged. We have reviewed progress made by innovators, venture capital support and repayment and also concepts and ideas to overcome difficulties faced by farmers and villagers have been discussed. Mr. Mariappan, Nagaram village explained water harvesting

structure for recharging wells near Puliyangudi village. Mr. Dhanraj served food recipe prepared from tapioca tubers brought from Namakkal district. After the lunch we have discussed how to strengthen the association for documentation of innovations, prototype development and marketing of innovators products. The innovators revolving fund to help the members have been presented by Mr. Banumoorthy, treasurer of the association. New office bearers have been elected which include Mr.P. Kandharaj as president, P.A.Sekar, secretary and Mr. Gayathriprasad as treasurer of the grassroots innovators association.



During this year we distributed micro venture support to 13 innovators to the tune of Rs. 4,71,500. The recovery performance is 22 %.

2. Training on Ethnoveterinary practices

Based on our experience in documentation of traditional knowledge we have standardized training programme for livestock keepers on herbal healing practices for animals. With support from Volunteers Education India(VSEI),Sustainable Livelihood Institute, Auroville (SLI), we organised two days training programme for self help group women members, village panchayat members from different districts in Nadukkuppam Training centre,

Pitchandikulam Forests, Vilupuram district on 17-18 Oct.2016, 23-24 Nov. 2016, 21-23 Dec. 2016, 4-7 Jan. 2017,21-22 Feb. 2017,15-16 March 2017.



We also organized documenting innovations and traditional practices with community members during that time. We are showing details of one of our skill development training for women and youth on best practices in management of livestock and sustainable agriculture in annexure-1



SEVA has been invited as official trainer(Mr.P.Vivekanandan SEVA as national resource person) for the training program on “Sustainable Livestock” in association with National Rural Livelihood Mission to staff of State Rural Livelihood Mission of North East (4-5

Dec.2016 at Guwahati) Jharkhand (15-16 Jan 2016 at Ranchi), Bihar (8-9 Feb'17 at Patna) Rajasthan (27 - 28 March'17 at Udaipur).



3. Dissemination of Innovation through local news letter “*Num Vali Velanmai*” :

We have been printing *Num Vali Velanmai* on quarterly basis in Tamil for dissemination of best traditional practices and grassroots innovations. It has circulation of about 2000 members in Tamil Nadu and it is the initiative of Honeybee Network sustained by us for the past 25 years and supported by National Innovation Foundation. Through this news letter we are able to disseminate innovations and traditional knowledge from other language regions of our country. We also give publicity for scouting and documentation of innovations through printing of leaflets, posters and in different workshops.

In collaboration with Annamalai University, Chidambaram (Business Management Development) Dissemination and Social Diffusion of Innovations for Business Development Competition-cum-Exhibition has been organised on 28-29 Dec. 2016 at Raja Muthiah Hall, Chidambaram. Six innovators displayed their innovations. Students have displayed their proto types, innovations, concepts, from 13 colleges. District collector Mr.T.P.Rajesh felicitated the innovators and visited our exhibition.





4. Breed Saviour Awards 2016



In association with National Bureau of Animal Genetic Resources, Karnal and Honey bee Network supported by National Biodiversity Authority we organise annual 'Breed Saviour Awards' to 20 outstanding pastoralists or livestock keepers conserving local livestock breeds across the country over the last 6 years. For this seventh year we documented 32 cases and

selected 21 members for awards at NBAGR, Karnal (being organised on 21-22 May 2017). We printed profiles of awardees and Dr Joykrushna Jena DDG –ICAR(Animal Sciences) has accepted to distribute the awards to 20 Pastrolists/ livestock keepers on the world biodiversity day on 22 May 2017.

5. Conservation of Pulikulam cattle:



Tamil Nadu Livestock Development Agency, Chennai approved a project to conserve Pulikulam cattle breed under Rastrya Gokul mission programme with the follwing components: Promotion of nucleus breeding unit with a livestock keeper; Installation of bore wells in 3 locations for providing animal drinking water source in Madurai and Sivagangai dsitricks; Capacity building of Pulikulam cattle herders assocation. We are working with District Joint director of

Animal Husbandry, Madurai to implement the programme with their moral and logical support.

7. Conservation of Vembur sheep:



With support from Centre Environment Education under UNDP Small Grants Programme SEVA has completed *Vembur sheep conservation* project. During this project period we constructed sheep shed for 15 pastoralists in Thoothukudi and Virudhunagar districts. SEVA has procured shed materials (GI Pipes, Asbestos sheet, Ankles) for all beneficiaries and cost of labour is contributed by the

members. Fifty percent of total cost or 15,000 whichever is less is treated as subsidy for the farmers and the remaining money is treated as loan and this has to be repaid over two years in eight installments or three months interval. Subsidy include the cost of shed materials procured and distributed to the beneficiaries. SEVA achieved more than 10 units proposed in the original proposal due to contribution by beneficiaries and interest of the herders in this scheme. The total money spent was Rs. 5,11,958/- compared to the original amount proposed Rs. 3,00,000/- .

During 2016-17 we constructed 5 sheds as shown below:

Sheep shed construction details

Sl. No.	Date	Name	Village	Material cost in Rs.	Transp rot/ Tax in Rs.	Loan Amount in Rs.	People contrib ution in Rs.	Total amount in Rs.
1	26.08.16	Ravikumar	Guruvarpatti	23000		23000	5000	28000
2	30.08.16	Angappan	Nathathupatti	22256	2819	1943 7	5200	27456
3	31.08.16	Raju	Nathathupatti	23210	2940	20270	4270	27480
4	31.08.16	Palani	Nathathupatti	25400	3217	22183	4300	29700
5	31.08.16	Perumal	Nathathupatti	7700		7700	2000	9700
			Total	101566	8976	92590	20770	122336

In order to understand sheep population dynamics and livelihood security to the marginal community we have surveyed the sheep population of Vembur breed in Virudhunagar and Thoothukudi districts. The survey has been jointly organized with representative of TANUVAS, SEVA staff by visiting sheep herds in many villages and observing them for purity of breed characters. Total no of Vembur sheep population in 60 villages is 28,422. The

majority of the herds were not maintaining purity and inbreeding occurs as they were not changing or replacing the males from other herds. Many herders expected us herbal preparations for deworming and for treatment of FMD and pure males of vembur sheep for breeding. We prepared the list of herders in need of quality males and they are being distributed with males from our nucleus breeding units supported by SEVA. The recorded villagewise sheep population is shown in annexure-2.

One day workshop with Vembur sheep breeders have been organized on 19.08.2016 in the panchayat community hall, Melakaranthai village, Thoothukudi district. There was participation of 32 herders owning vembur sheep breed from many villages of Virudhunagar, Thoothukudi district. Govt. animal husbandry department veterinarians (Melakaranthai and Vembur veterinary Centre) Dr. Selvakumar, Scientist from TamilNadu Veterinary & Animal Sciences University, Veterinary College, Tirunelveli attended the workshop. There was discussion on scientific management of vembur sheep breed, changing of males for breeding at every 3 years, schedule of treatment against disease including preventive vaccination, feed, fodder etc. Booklet on “Vembur sheep breed” has been released. Besides sheep herders, social workers, NGOs also attended the workshop.



Financial support Received during 2016-2017

1. National Innovation Foundation, Ahmedabad -9th (2nd phase) & 10th Round completion for Scouting and Documentation of Innovations in Tamil Nadu, Pondicherry and neighboring States Rs.4,40,315
2. National Bio-Diversity Authority, Chennai -Bread Saviour Award 2015&2016- Rs.4,60,000
3. NABARD, Pune -Bread Saviour Award-2015 Rs. 1,40,195
4. Centre for Environment Education, Ahmedabad(UNDP-SGP) - Rs.2,28,800
5. Volunteers in Service to Education in India, USA- Rs.53,940
6. Food and Agriculture Organisation, Rome (GPA-AnGR),-Rs.6,60,135
7. Food and Agriculture Organisation, Rome (TECA) -Rs.97,470

08-07-2017

P.Vivekanandan
Executive Director, SEVA

Annexure-1

Skill development training for women and youth on best practices in management of livestock and sustainable agriculture

Three days training programme has been organized by SEVA on sustainable practices in agriculture and livestock management on 21 – 23 Dec. 2016 at Nadukkuppam training centre, Pichandikulam forest, Villupuram district, Tamil Nadu. 24 members representing Self Help Groups, local panchayat from Cuddalore, Villupuram, Nagapattinam, Tiruvarur districts.



In the first day self introduction has been made along with brief background of members. Sessions on breeds of livestock, construction of animal shed, growing of fodder crops, preparing feed ration for animals, seasonality of disease for animals, first aid practices, ethno veterinary treatment using locally available materials have been completed. In the afternoon field visit has been arranged to visit Annapoorna Cattle

Farm, Auroville, near Pondicherry.

In the 2nd day preparation of 3 herbal recipes for treatment of different disease of animals has been demonstrated at Nadukkuppam training centre. It includes preparation of herbal masala bolus for different digestive problems of animals, Mathan thailam for wound healing, herbal de-wormer for control of internal parasites of animals. Members have been divided into 3 groups for completing the practical session.



In the afternoon the members administered the herbal preparations to animals in Vandipalayam village. The members also documented herbal healing practices of Mr. Seenivasan a local Vaidya in Vandipalayam village.



In the 3rd day group discussion on livestock management, sustainable agriculture, identification and use of medicinal plants have been organized. Members presented the outcome of discussion. Few members presented their experiences on local practices which are followed by them in agriculture and animal husbandry and human nutrition.



A visit to Poorvikam herbal garden near Pondicherry has been organized on the last day. This centre has been conserving more than 700 medicinal plants useful for treating human and animal diseases. Dr. Loganathan founder of the Poorvikam centre explained about the uses of different medicinal plants grown in their garden. Resource material and group photo have been presented to the members in the concluding session.

Cultural programme has been organised in the evening.



Annexure-2
Population Statistics of Vembur sheep (2016)



Visiting nucleus breeding unit by IFAD project expert Dr. Thanammal

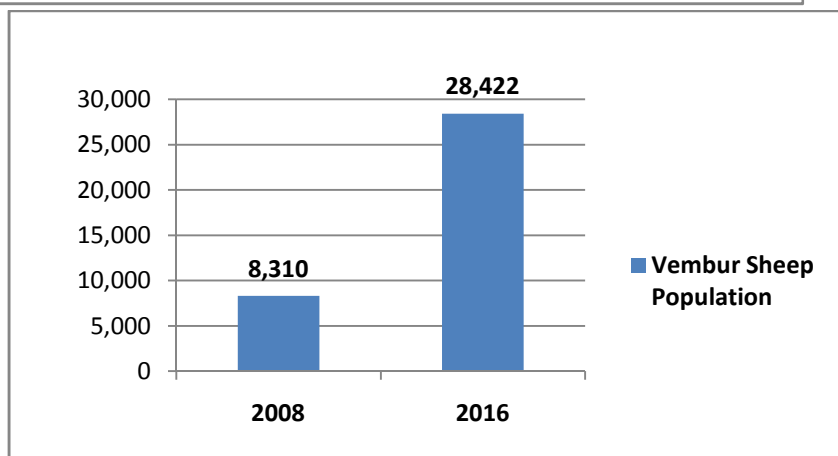
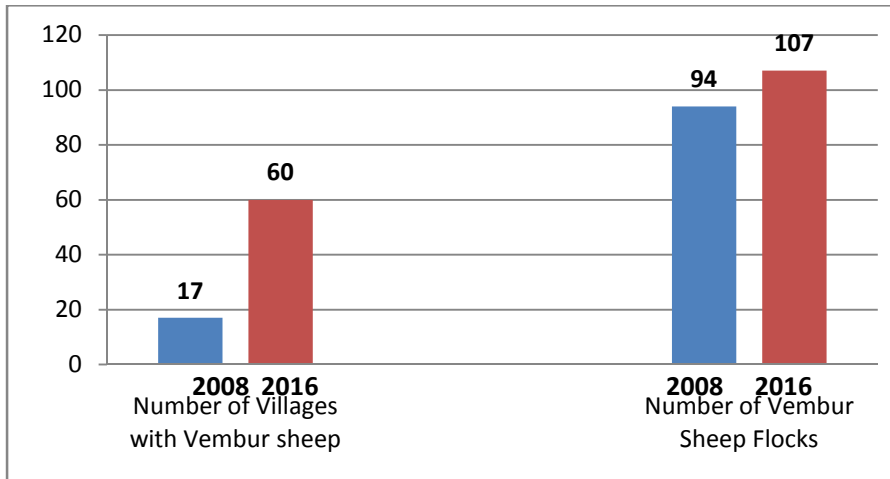
Sl.No	District	Taluk	Village	No of flocks	Sheep Population
1.	Thoothukudi	Ettaiyapuram	Vembur	6	419
2.	Thoothukudi	Ettaiyapuram	Mettlepatti	6	618
3.	Thoothukudi	Ettaiyapuram	Mavilpatti	4	234
4.	Thoothukudi	Ettaiyapuram	Ramasamyapuram	3	291
5.	Thoothukudi	Ettaiyapuram	Melakaranthai	8	604
6.	Thoothukudi	Ettaiyapuram	Pattidevanpatti	1	173
7.	Thoothukudi	Ettaiyapuram	Oothupatti	3	210
8.	Thoothukudi	Ettaiyapuram	Jaganathapuram	4	305
9.	Thoothukudi	Ettaiyapuram	Thapathy	5	406
10.	Thoothukudi	Ettaiyapuram	South muthulapuram	4	340
11.	Thoothukudi	Ettaiyapuram	M.Kottur	5	606
12.	Thoothukudi	Ettaiyapuram	Masarpatti	2	234
13.	Thoothukudi	Ettaiyapuram	Kambathupatti	4	2,235
14.	Thoothukudi	Ettaiyapuram	Chinnavannaikenpatti	3	204
15.	Thoothukudi	Ettaiyapuram	Alagapuri	2	607
16.	Thoothukudi	Villathikulam	Kodangipatti	4	276
17.	Thoothukudi	Ettaiyapuram	Panayadipatti	6	406
18.	Thoothukudi	Kovilpatti	Manthithoppu	6	316
19.	Thoothukudi	Kovilpatti	Mayuranathapuram	1	73
20.	Thoothukudi	Villathikulam	Guruvarpatti	4	190
21.	Thoothukudi	Villathikulam	Karisalkulam	2	60

Sl.No	District	Taluk	Village	No of flocks	Sheep Population
22.	Thoothukudi	Villathikulam	Pullagoundanpatti	5	577
23.	Thoothukudi	Villathikulam	Melanambipuram	14	2,268
24.	Thoothukudi	Villathikulam	Suraikkaipatti	7	677
25.	Thoothukudi	Villathikulam	Pulivadunaiyakkanpatti	15	1,280
26.	Thoothukudi	Villathikulam	Jagaveerapuram	6	645
27.	Virudhunagar	Sattur	Vallampatti	8	621
28.	Virudhunagar	Sattur	Soorankudi	9	912
29.	Virudhunagar	Sattur	Subbulapuram	1	55
30.	Virudhunagar	Sattur	Sivasangupatti	6	491
31.	Virudhunagar	Sattur	E.Madathupatti	6	500
32.	Virudhunagar	Sattur	Karanjanpatti	3	220
33.	Virudhunagar	Sattur	E.Ramanathapuram	6	585
34.	Virudhunagar	Sattur	Nathathupatti	9	1,073
35.	Virudhunagar	Sattur	K.Chokkalingapuram	4	320
36.	Virudhunagar	Sattur	Kundalakuthur	3	277
37.	Virudhunagar	Sattur	E.Reddiypatti	2	225
38.	Virudhunagar	Sattur	Samythevanpatti	1	335
39.	Virudhunagar	Sattur	Pandiyapuram	1	73
40.	Virudhunagar	Sattur	Solaiipatti	3	183
41.	Virudhunagar	Sattur	Duraisamiyapuram	5	463
42.	Virudhunagar	Sattur	Sankarapandiyapuram	11	833
43.	Virudhunagar	Sattur	Valsapuram	3	537
44.	Virudhunagar	Sattur	Vembakkottai	1	94
45.	Virudhunagar	Sattur	Komalipatti	3	243
46.	Virudhunagar	Sattur	E.Meenatchiyapuram	5	621
47.	Virudhunagar	Sattur	Kankarseval	12	659
48.	Virudhunagar	Sattur	Lakshmiyapuram	6	222
49.	Virudhunagar	Sattur	Kanainjanpatti	5	262
50.	Virudhunagar	Sattur	Sivalingapuram	3	161
51.	Virudhunagar	Sattur	Kuganparai	6	524
52.	Virudhunagar	Sivakasi	Sevalpatti	5	469
53.	Virudhunagar	Sivakasi	Ammaiyarpatti	5	413
54.	Virudhunagar	Sivakasi	Alamelumangapuram	4	444
55.	Virudhunagar	Sattur	Pullagoundanpatti	5	577
56.	Virudhunagar	Sattur	Vallaiyapuram	14	1042
57.	Virudhunagar	Sattur	Paraipatti	3	198
58.	Virudhunagar	Sattur	Ottaiyal	5	256
59.	Virudhunagar	Sivakasi	Sanyasipatti	1	80
60.	Virudhunagar	Sivakasi	Singampatti	1	200
Total					28,422

Total no of Vembur sheep population in 60 villages = 28,422

Analysis of Sheep Population

Particulars	Year 2008	Year 2016
Number of villages with Vembur sheep	17	60
Number of Vembur Sheep Flocks	94	107
Vembur Sheep Population	8,310	28,422



Outcome of project (Results achieved)

Sl.No.	Activities undertaken	Original targets proposed	Achieved
	Construction of sheep shed	10	15
	Nucleus breeding units	10	19
	Animal health camps	20	31
	Fodder development	10 villages	13
	Printing of book on Vembur sheep breed	1 Book	1 Book
	Training workshop on scientific breeding	1	2
	Population survey of the sheep breed	60 Villages in Virudhunagar and Thoothukudi districts	Completed in 60 villages

In the case of construction of sheep shed we have covered 15 herders and completed construction of 15 sheds compared with original target of 10. The total cost of construction was Rs. 5,11,958 (Original cost proposed was Rs. 3,00,000) and people contribution was Rs. 1,75,270. This programme generated much interest among the community and many people are interested to avail this facility. Even after completion of the project the breeders association has revolving fund of Rs. 3,36,688 and this will be used for giving additional credit and money will be recovered and it is sustainable.

Providing shed to the herders is an important permanent asset for them. Besides that it has reduced or avoided mortality rate of animals due to unhygienic condition of halting site exposed to rain or climatic condition. The beneficiaries are cleaning the shed regularly and disposing the dung which led to hygienic condition of the environment which contribute to the health status of the animals including young kids. By seeing this programme many herders in nearby villages are approaching us for their participation and coverage. The loan money recovered is deposited in the breeders association account. The accrued money will be used to extend support for other herders for construction of sheep shed in future.

The herders who maintain nucleus breeding units will get good income by selling quality males to other herders due to original breed characters maintained by them. This programme has oriented the breeders on scientific breeding strategy to change the males once in 3 years to keep up the original breed characters, vigour while avoiding inbreeding within the herd. The population of pure Vembur sheep breed increased already and it will keep on increasing if this approach adopted by the herders. The population of the sheep has increased from 8,310 to 28,422 over a period of 8 years. Now there are 107 livestock keepers maintaining Vembur sheep compared with 94 in 2008.

During our health camp the herders have learned herbal preparations for treatment of animal diseases viz. herbal masala bolus, herbal de-wormer, wound healing *thailam* (oil). We hope that 50 percent of participating pastoralists will able to prepare by themselves or they are interested in purchasing the herbal medicine on cost basis. This will ensure avoiding mortality of animals and get over the risk of economic loss for the herders in sheep husbandry.

Fodder development has been promoted in 13 villages and 78 members covered over an area of 35 acres of land. The number of villages proposed was 10 and we covered 13 villages. The total area proposed 500 acres has been covered indirectly with participation of forest department who supplied neem seedlings in these villages. However there is less cooperation with officials of forest department who are interested to cover pure neem tree plantation on acre basis instead of farmers requirements of 10 – 50 seedlings for raising as intercrop in drylands (agroforestry model).

We have organized two orientation workshop on scientific breeding method : one at the inauguration of the project and the another at the end of the project completion. There was participation of 76 members in these 2 workshops instead of 100 in the target. Due to lack of labour availability the herders family members are involved in grazing their animals and few members could not attend the workshop. However breeding strategy has been conveyed to them during monthly meetings or loan recovery meetings. Tamil Nadu Veterinary and Animal sciences University (TANUVAS) appreciated our breed conservation programme and they officially involved in the breed survey and also in the breeders workshops. The booklet on Vembur sheep breed printed by us shows details of origin of breed, breed characters, breed population in different villages, CEE / GEF supported activities undertaken through SEVA. It also give strategies for future plan of conservation of Vembur sheep breed to be taken up by the government administration, community etc.