

## SEVA Annual Report 2017-2018

### **Documentation of Innovations:**

During this year we have documented 189 innovations/practices (herbal practices for human 46, herbal practices for animals 92, agricultural practices 21, agricultural implements 12, mechanical innovations 14, new crop variety 1, and food recipes 3 and submitted to National Innovation Foundation, Ahmadabad (NIF).

### **Dissemination of Innovations:**

“Num Vali Velanmai” has been printed in Tamil at quarterly interval for dissemination of innovations. There are 97 new annual subscribers and 229 life subscribers.

#### **1. Dissemination of Handloom innovation:**

Mr. Banumurthi innovator has installed his innovation ( Automatic weft insertion in handlooms saree weaving) in Kopargan village near Shirdi, Maharashtra in a weaver’s handloom Mr. Jayaraj Pawar during Feb. 2018. We are organizing a training programme for training of 50 weavers in 2 batches. Each batch for 2 days during April 2018.

Mr. Banumurthi innovator has installed his innovation in Dharmavaram town in Telengana state in the weaver’s loom of Mr. Nageswar Rao last week of March 2018. (Mr Nageswar Rao is running 100 handlooms in a multistoreyed building) We are in discussion with the master weaver in providing training programme for the local weavers later.

#### **2. Sowing of Bajra:**

The traditional variety of bajra Sulkhaniya -7 kg receive from NIF. It has been distributed to 5 farmers in Dindigul, Madurai, Virudhunagar districts. They raised the crop during North East monsoon of 2017. We are unable to record the yield particulars for the reason:

Bird damage to the earhead in the farmers field. Therefore 2 farmers now resown the variety and it is less than one month old now. We will this time take steps to protect the crop from birds and record the performance data.



Address of the Farmer: Mr. Dharmarajan, Trichy,



Mr. Veeraraj- Karur

### **3.Demonstration of New Weeder of Mr. Baliah:**

Mr. Balaiah is a scooter mechanic cum small farmer developed power weeder using chetak Engine for garden land weeding. He has sold about 50 weeders. We come across about its worthiness through Honeybee AP/Creative Minds. We procured the machine at Rs. 26,000 and demonstrated in Vellayapatti village, Palamedu, Madurai District on 21.1.2018. By seeing the field level operational difficulties we have slightly reduced the length of chasis extra wheel in the backside and this is still at designing stage. We hope this will be completed successfully to suit local conditions. However local farmers are keen in procuring this weeder after satisfying its operation.

Mr. Annamalai, Mr. Gayathri Prasad, India Bharathidasan innovators closely follow up in the improving the weeder design in a lathe workshop.



### **4.Apple Seedlings distribution in Idukki, Kerala:**

We have distributed apple seedlings of HRMN 99 variety developed by Mr. Hariman Sharma Himachal Pradesh to 10 farmers in Idukki district Kerala during Feb.2015. We have recorded the growth of the seedlings during April 2016 and November 2017. We have noticed flowering during April 2016 and fruit setting during November 2017. In some places there was mortality of few seedlings due to collar rot disease.



Pictures taken during November 2017 with new fruits setting

### **State level workshop on “Grassroots innovations”**

Two days State level workshop on “Grassroots innovations” has been organized on 29-30<sup>th</sup> July 2017 at Thiagarajar College of Engineering(TCE), Madurai. There was participation of 106 members including Innovators, herbal healers, students and academicians. The workshop was inaugurated by Dr. Vasudevan, Dean TCE, Madurai. Dr. Tamilselvi, Coordinator NSS Programme of TCE welcomed the participants.

Mr. P. Vivekanandan, SEVA gave introduction of this workshop and asked the innovators to brief about their background and innovation. While the innovators briefing their innovations video have been displayed simultaneously to understand better the technology of their products or practices developed by them.



A special guest speaker Dr. Krishna Vedula, visiting professor Massachusetts Institute Technology, USA. In his address he suggested students of engineering college to involve in practicals with innovative concepts/ideas or prototypes so that creativity leads to self employment in future. He discouraged all the students taking up assignments in IT sector.

Dr. Vasudev suggested to promote ‘entrepreneurship centre’ at TCE with selected innovators products through collaborative project. This will help students to start their own self employment awareness after the completion of their courses.

Dr. Tamilselvi suggested to make demonstration of few innovations as permanent exhibition on the utility of green/low cost technologies at their campus.

In the afternoon the exhibition of innovators products opened by Dr. Karl Marx, coordinator of GIAN Cell/TCE and the innovators explained them to the participants. Some prominent products include: manual weeder by India Bharathidasan, Solar water pump by Sri. Pandiyarajan, Coconut deshuser by Sri. Kandaraj, water conservation technique by Nagarajan, medicinal plants by Palanivelu, borewell tool lifting device by Mr. Jeyaprakash, Road safety indicators by Mr. Saravanan.



In the afternoon the innovators continue presenting their innovations. Dr Karl Marx coordinator of GIAN Cell TCE concluded the first day programme and give for scope for validation and testing selected innovations with TCE. In the next day there was brief presentation of those innovators who did not attend the first day programme. The general body meeting of innovators begun by 12 noon and this was presided by Mr. Kandaraj, President of innovators association. In the general body marketing of innovators products, micro venture support for innovators products, repayment of loans, scouting of innovators and action against copying of innovations were discussed. Finally resolutions were passed to extend micro venture support for the following innovators:

1. Mr. Saravanamuth- Thoothukudi (Rs 35,000) to complete the prototype of Scooter for Physically challenged
2. Smt Latha, Cuddalore – (Rs10,000)- Value added Pickle making
3. P.L. Banumurthy-Thiruvannamali district (Rs 50,000)-For expansion of Automatic weft insertion in handlooms.

Mr. P.A. Sekhar secretary of innovators association proposed vote of Thanks.

Mr. Nagarajan, innovator contributed Rs.5000/- to meet the part of workshop expenses on 29-30<sup>th</sup> July 2017.

### **Vembur Sheep breed Conservation:**

After completion of CEE supported programme we have been continuing the vembur sheep breed conservation by extending micro credit for sheep housing, family expenses, agricultural operations etc. we extended Rs. 3,31,000 to 15 members. The repayment was Rs. 1,68,000 till date. The project is being implemented in Pudhur block (Thoothukudi district) and Nathathupatti village, Sathur block Virudhunagar district.

We have conducted monthly meetings with breeders keeping Katchakatti black sheep in Vadipatti block Madurai district

## Training for Ethnoveterinary practices for farmers and officials of NRLM

S.No	Date	Training	Place	Resource Person
1	20-21 April 2017	Ethnoveterinary	SLI, Pondichery	C. Balasubramanian & S.G. Selvi
2	10-11 May 2017	Ethnoveterinary	SLI, Kottakarai, Villupuram	C. Balasubramanian & S.G. Selvi
3	8-9 June 2017	Ethnoveterinary	SLI, Kottakarai, Villupuram	C. Balasubramanian & S.G. Selvi
4	23-24 July 2017	Ethnoveterinary	SRLM, Kolkatta	P. Vivekanandan
5	7-8 August 2017	Ethnoveterinary	SRLM, Jawhar, Maharashtra	P. Vivekanandan
6	16-17 August 2017	Ethnoveterinary	SLI, Kottakarai, Villupuram	C. Balasubramanian & S.G. Selvi
7	13-14 Sep. 2017	Ethnoveterinary	SLI, Kottakarai, Villupuram	C. Balasubramanian & S.G. Selvi
8	21-22 Nov. 2017	Ethnoveterinary	SLI, Kottakarai, Villupuram	C. Balasubramanian & S.G. Selvi
9	6-7 Dec. 2017	Ethnoveterinary	Veterinary college & Research Institute, Tirunelveli	C. Balasubramanian & S. M. Arumugam
10	8 Dec. 2017	Ethnoveterinary	Farmers Training Centre, VCRI, Dindigul	C. Balasubramanian & S. M. Arumugam & Panaiyammal
11	11 Dec. 2017	Ethnoveterinary	Farmers Training Centre, VCRI, Dindigul	C. Balasubramanian
12	12 Dec. 2017	Ethnoveterinary	VCRI, Orathanadu	C. Balasubramanian
13	10 January 2018	Ethnoveterinary	VCRI, Cuddalore	C. Balasubramanian
14	21-25 January 2018	Katral Thrivizha	Azim Premji Foundation, Pondicherry.	P. Vivekanandan & C. Balasubramanian & S.G. Selvi
15	2 Feb. 2018	Ethnoveterinary	SLI, Kottakarai, Villupuram	C. Balasubramanian & S.G. Selvi
16	12-13 Feb. 2018	Ethnoveterinary	SLI, Kottakarai, Villupuram	C. Balasubramanian & S.G. Selvi
17	16 Feb. 2018	Ethnoveterinary	VCRI, Tiruvaru	C. Balasubramanian
18	5,6,7 March 2018	Ethnoveterinary	DHAN Foundation, Anjetti	C. Balasubramanian & S.G. Selvi
19	12 March 2018	Ethnoveterinary	VCRI, Nagapattinam	C. Balasubramanian
20	28 March 2018	Ethnoveterinary	SLI, Kottakarai, Villupuram	C. Balasubramanian & S.G. Selvi

## National Workshop on Community Based Conservation of Local Livestock Breeds & Breed Saviour Award 2016 Ceremony

SEVA in association with National Bureau of Animal Genetic Resources, (NBAGR), sponsored by National Biodiversity Authority (NBA) organized the National Workshop at NBAGR Karnal on 21-22 May 2017.



This is the 7<sup>th</sup> workshop which exclusively recognizes pastoralists and livestock keepers conserving native livestock breeds in our country through Breed Saviour Award Ceremony organized every year since 2009 onwards. Recognition through cash & kind awards also carries a positive message amongst the keepers and other stakeholders for accepting the local breeds in the local milieu. The concept of such Awards was developed during 2008 by members of the LIFE Network and Honey Bee network (a loose network of NGOs and individuals working on animal genetic resources and grassroots knowledge and innovations in the country). National Biodiversity Authority (NBA), Chennai has agreed this concept and has been supporting this programme. Thus so far a total of 144 breed saviours awards have been given during the last 7 years. The awards have covered 68 recognized breeds and also the lesser known populations like Kasargod cattle, zo-Bawng cattle, Himalayan cattle, Mizo cattle, Nattumadu cattle, Malimadu cattle, Nallamala cattle, Vivadiri cattle, Alamabdi cattle, Gojiri buffalo, Rairakhol buffalo, Bargur buffalo, Ari-Adu sheep, Chevadu sheep, Bhagli sheep, Boti sheep, Katchakatty Black sheep, Duma sheep, Naattukuriyadu sheep, Nattu Karuppadu goat, Alwari goat, Kharai camel, Kachchi horse, Kachachi donkey, Kanni dog, Mudhol hound dog, Ankamali pig. Aseel poultry, Hazra Poultry, Chittan Kozli poultry, Indian Runner duck, and Kuji duck. The Awards recognized the presence of these lesser known populations, which warrant further attention of different agencies as some of them are strong candidates for registration and further efforts of conservation at the official level. The award functions have highlighted the presence of such populations in different parts of the country and it is encouraging to note that some of the defined populations that had been recognized by the Awards were subsequently accepted and registered with NBAGR,

Karnal at the national level. E.g. Banni and Chilika buffalo, Pulikulam, Malnad Gidda cattle and Kachaikatti black sheep. This is unique effort deserving of more attention and support. One day visit cum demonstration of Herbal masala bolus has been arranged at Jundala Gaushala near Karnal on 21-05-2017. Dr R.K. Pundir, Principal Scientist, NBAGR explained ongoing project in the Gaushala with an objective of upgradation of local cattle with the superior bull semen of Haryana and Sahiwal through Artificial Insemination (AI). There are hundreds of cattle maintained in the Gaushala run by Gopal Swamiji initiated in 1990. SEVA team members prepared herbal masala bolus and explained the method of preparation. Local farmers were keen on the method of herbal preparations for different type of disease of animals.

The next day on 21<sup>st</sup> afternoon the participants shared their best practices in conserving or breeding their animals at their places. It includes feeding practices, management and low cost herbal treatment etc.

ICAR-National Bureau of Animal Genetic Resources celebrated International Biodiversity Day during 21-22<sup>nd</sup> May 2017. During this event Dr. Joykrushna Jena, Deputy Director General (Animal and Fisheries Sciences), ICAR was the Chief Guest and Dr. R.S. Gandhi (ADG) and RRB Singh (Director, NDRI, Karnal) were Guests of Honour and Arjava Sharma, Director of ICAR-NBAGR, Karnal presided over the function.



A total of 20 farmers/Livestock Keepers from 9 states were selected by SEVA, Madurai for Breed Savior Award-2016. Mr. Karam Chand for Gaddi goat (Himachal Pradesh), Mr. Prajwal Chandrakant Kandalkar and Mr. Sunil Bhausahab Kharade for Gaolao Cattle (Maharashtra), Mr. Rahul Kasnia for Beetal goat (Punjab), Mr. Kudala Ram Das for Punganur Cattle and Mr. Muralidhar Reddy for Ongole Cattle (Andhra Pradesh), Mr. Dabhisavjibah Thebanbah for Kahami Goat and Mr. Ranabhai Govindbhai Bharwad for Halari Donkey (Gujarat), Mr. Nakku and Mr. Rinchin Tsering for Arunachali Yak (Arunachal Pradesh), Mr. R. Sivakumar for Coimbatore Sheep, Mr. N. Shanmugam for Salem Black Goat, Mr. G. Ramasamy for Umbalachery Cattle, Mr. B. Madhayan for Bargur Buffalo and Mrs. Palaniyammal for Nattu Kuriyadu Sheep (Tamil Nadu), Mr. Shivanna Thambidi (Alambadi Cattle), Mr. Ramanna Vittal Gasti for Mudhol Haund Dog and Mr. Udaya Kumar for Chittan Kozhi Poultry (Karnataka) and Sankaman Subba for Siri Cattle (West Bengal) were honored for their contribution in

conservation of respective breeds. Breed Savior awards with certificate and award money of Rs. 10,000/- was presented to these twenty awardees for their sincere efforts in conservation and saving native livestock/poultry breeds.

Thirty two entries for Breed Saviour awards 2016 documented from different states have been referred to a committee (comprising of representative of NBAGR-Dr PK Singh, Dr Kamal Kishore coordinator of Rainfed Livestock Network, Dr D.K. Sadana retired Principal scientist of NBAGR) and based on selection criteria the awardees have been selected.

At the Occasion a Poster competition on the subject "Biodiversity and its conservation" was also organized for school students of Karnal (Haryana) and Research Scholars of ICAR-NBAGR, Karnal. In the School group, Delhi Public School (First), Tagore Bal Niketan (Second), The Millennium School and Adarsh Public School (Third) received the awards. Among Research Scholars Group, Ankita Sharma, Himani Sharma and Prerna Kapoor secured first, second and third positions.

In the main function the Chief Guest Dr Jena said that conservation of domestic animal diversity is need of hour and all the stakeholders should contribute in this noble cause. He recognized the contribution of livestock and poultry in food and nutritional security, Indian agriculture and rural employment. He stated that winners of today's function are ambassadors for conservation of domestic Animal Diversity in their respective states. Sh. P. Vivekanadan, Director, SEVA gave the history of Breed Savior Award since its inception in 2009. The Director and Chairman of the Programme presented the role of NBAGR in conservation of precious domestic animal diversity of India. Dr. D.K. Sadana welcomed the participants and Dr. P.K. Singh conducted the programme. Dr. R. Sahai Ex Director of NBAGR, Karnal presented a poem in English on biodiversity conservation on the occasion of world biodiversity day. The poem is shown in Annexure . At the end Dr. K.N. Raja proposed vote of thanks.

The individual profiles of individual Breed Saviour Awardees are shown in the book on "Breed Saviour Awards 2016" which have been distributed to all the participants.

### **Conservation of Local Livestock Breeds in Madurai Symposium**

As a part of Madurai Symposium 2017 a workshop with pastoralists/herders keeping native breeds of livestock has been organised on 23.9.2017 at Thamukkam ground. Madurai.

Farmers conserving Pulikulam, Malaimadu , Umbalachery cattle, Vembur sheep attended the workshop representing different districts. They highlighted how they can earn income by maintaining local breeds of cattle, sheep etc. The animals are kept in herds under extensive production system and they depend upon common lands, tanks for open grazing. Nowadays due to disappearance of common lands and pasture lands they face difficulties in grazing them and also availability of labour to look after the animals is very difficult.

The workshop appealed the following points for intervention at policy level:

- i) Livestock keeping herders shall not face any restriction to enter into any village for purpose of grazing or penning in farmers fields in spite of objections by few villagers.
- ii) The tanks and ponds which are meant for animal drinking water are to be renovated. New ponds are to be dug for this purpose in villages wherever necessary.
- iii) The exotic species *Prosopis juliflora* has to be eradicated in common lands
- iv) Identity Cards shall be given to herders keeping native breeds for smooth migration of herds while crossing highways, forests and city area etc.
- v) The Forest Rights Act 2006 has to be implemented in order to access to grazing in forest areas during rainy season as per the pastoralists grazing rights prescribed in the Act.
- vi) In order to avoid labour shortage for grazing the cattle the authorities concerned ensure labour availability for this purpose under 100 days employment program me / RLEGP.
- vii) For selling manure of Pulikulam cattle, district authorities ensure remunerative price is fixed with customers from Kerala etc.



In the workshop demonstration on preparation of different herbal recipes against animal diseases (digestive disorder, Foot and Mouth Disease, mastitis, internal and external parasites), azolla cultivation as feed supplement have been performed by volunteers of SEVA NGO.

Dr. M.Balachandran , Joint Director of AH. Madurai and Sri. P. Vivekanandan, Executive Director of SEVA spoke on that day.