

1. Title: **Success Story of ‘Entrepreneurship Development Through Technology of Value Added Milk Products’**

2. Category: Animal Husbandry

3. Challenge:

Demand for value added milk products is increasing day by day with increase in purchase power and health consciousness in all sections of the Indian society. Huge amount i.e. about 88 % of total milk production of India is handled by unorganized sector and only about 12% by the organized sector. About 46% milk is utilized for home consumption and by Halawais. About 50% of the milk is converted into traditional milk products; only 4 % into universal milk products and 46% milk is sold as liquid milk. Considering huge opportunity for entrepreneurship development through technology of value added milk products in rural as well as urban area the project on entrepreneurship development was implemented at Krantisinh Nana Patil College of Veterinary Science, Shirval, Dist.: Satara, Maharashtra under RKVY during 2011 to 2013. As an intervention, the hands on trainings on value addition to milk were organized for unemployed youths and farmers. There was overwhelming response from farmers and unemployed youths from all regions of the Maharashtra for participation in the training. Project workers have to prepare wait list of the candidates interested for participation in the training.

4. Initiative:

Following activities were taken up through the RKVY funds amounting Rs. 60.00 Lakh.

a. Establishment of Milk Processing Demonstration Unit with following facilities:

1. Milk Pasteurization Plant (Capacity: 200 lit /hour)	HTST Pasteurizer Unit, Homogenizer, Storage Tank, Automatic Milk Pouch Packaging Machine
2. Milk Products Section	Cream Separator, Multipurpose Heat Exchanger (for preparation of khoa, basundi etc.), Multipurpose Stirrer (for preparation of lassi, chhas etc.), Planetary Mixer (for preparation of chakka, shrikhand etc.), Softy Ice-cream Freezer, Paneer Press etc.
3. Packaging Section	Vacuum Packaging Machine, Bottle Corking Machine, Foil Sealing Machine, Hand Sealer
4. Storage Section	Refrigerators and Deep Freezers
5. Quality Control Lab.	Milk Analyzer, Protein Auto Analyzer, Viscometer, Brix Meter, Refractometer, BOD Incubator, Autoclave, Furnace, Soxhlet Assembly, Laminar Flow, pH meter etc.
6. Alternative Power Source	D. G. Set (15 KVA)

b. Establishment of Training Center:

Training center has been established in the existing building of the college by purchasing required furniture and audio-visual aids.

c. Training on Value Addition to Milk:

Five days hands on trainings on milk collection, processing, quality control and production of value added milk products were conducted. Applications of desirous candidates were invited by publishing advertisement in Marathi daily news paper. Eligible candidates selected from the received applications were invited for the training. Expenditure on lodging, boarding and training was met from the grants received under the project. In addition to lectures, the emphasis was given on hands on training through practicals, demonstrations and visits to entrepreneurial units. Lectures on entrepreneurial skill development, government rules and regulations and government schemes were organized by inviting faculties from Maharashtra Center for Entrepreneurship Development, Food Safety and Standards Authority of India and NABARD respectively. Total 490 beneficiaries from all over Maharashtra have been trained during the project period against the project target of 450. Impact assessment was done by sending proforma to all trainees through post as well as by telephone calls. Total 121 beneficiaries responded to the impact assessment out of which 33 value added milk products manufacturing units, 46 milk collection units, 6 milk processing units and 5 milk products trading units have been started. Two trainees got employment in private dairy plants, knowledge diffusion was done by 5 trainees and 24 proposals were under progress.

5. Key result/insight/interesting fact:

Income of 128 trainees who started various units has been increased by many folds. They have provided employment to other unemployed youths in rural area as well as milk producers supplying milk to their units. They have developed infrastructure for their units viz. milk collection, milk processing, milk products manufacturing etc.

6. Impact:

Trainees were empowered with technical knowledge and skill for milk collection and processing as a result of which many of them started new units and some have strengthened their units which were about to close due to accrued losses. They have developed positive attitude which resulted in successful units. They have provided employment to unemployed youths in rural area and milk producers supplying milk to their units. Capacity of the units ranges from 50 lit per day to 5000 lit per day. Social status of the trainees have been improved due to their successful units. Many other trainees who have not responded to the impact assessment process might have started their units. Many of them have their own cattle or buffalo farms the profit of which has been increased due to selling the milk after processing.

Beneficiaries of the project are successful in running their units due to technical knowledge and skills they have acquired through the training at RKVY project. This will have large scale impact on the cottage industry of indigenous milk products which is dominated by untrained persons having traditional knowledge only. If such projects for entrepreneurship development through technology of value added milk products are started all over the country,

it will have large scale impact on employment generation as well as it will help in doubling the farmers income- the initiative of Government of India.

7. Lessons learned:

Hands on training on value added milk products are promising area for entrepreneurship development in rural as well as urban areas. It was challenging to run the project in meager manpower. To overcome this, the project workers themselves worked as faculty as well as plant operators and persons at class four level were employed on contractual basis. If the project is to be implemented again in existing situation we will enter into PPP (Public-Private-Partnership) for running the milk processing demonstration unit which will result is still better hands on training as well as research on various aspects of small scale milk processing and value addition to milk.

8. Supporting Quotes and images:

**a. 'Sawata Mali Dairy':**

Mr. AvinashRawanPatil,

At Po.Aran, Tal: Madha, Dist: Solapur, Maharashtra.

Mob no.: 9881882558, E-mail: [arpatil58@gmail.com](mailto:arpatil58@gmail.com)

Education: B. Sc.

After completion of the training he started using the knowledge and skills viz. testing of milk for fat, SNF, acidity and adulteration etc. in his milk collection and got very good results. His unit which was in loss for last many months started earning profit. Collection of milk increased from 500 lit per day to 5000 lit per day within two years after completion of the training. With bank finance he has established milk chilling plant of 5000 lit capacity. He is supplying chilled milk to private milk processing plant on contract basis. He has provided employment to 5 unemployed youths in his village and good market rate for milk of more than 500 milk producers. Future plan is to start own brand of milk and milk products.



**b. ‘SaiDugdhalay’, BhairavnathDugdhalay and Navami Milk and Milk Products:**

Mr. MANE DANRAJ PANDURANG, Mr. DHANE DHARYASHIL ASHOK and Mr. SHINDE SWANAND ARUN, At.Po.Bhose, Tal: Koregaon, Dist: Satara, Maharashtra Mob No.: 9850464717

After completion of the training these three unemployed youths converted their milk collection center in loss in to center in profit. Per day milk collection increased from 300 to 4500 within 18 months by use of milk analyzer & quality control tests. Started two retail outletsof milk and milk products named ‘SaiDugdhalay’ and

‘BhairavanathDugdhalay’ and proposed to start third unit as ‘Navami Milk and Milk Products in next one to two months by agreement with Gits India Pvt. Ltd to supply them 5000 lit milk per day. Milk is sold as liquid milk by home delivery-400 lit, supply to hotels and halawais-400 lits and remaining milk is supplied to private milk processing plant. Established two own bulk coolers with capacity of 2000 and 1000 lit for chilling the milk before delivery. Milk is being collected from more than 500 farmers in 5 villages through 13 collection centers. Provided direct employment to 5 unemployed youths and indirectly to more than 20 youths.



**c. 'Ekata Dairy':**

Mr. PRAVIN GULAVE,  
At Po.Bhagur, Dist: Nasik, Maharashtra  
Mob. No. : 9226213255

After training per day milk collection increased from 300 lit to 2500 lit through strict quality control and payment of milk based on Fat & SNF content. Producing Basundi, Khoa, Peda, Barfi, Gulabjamun, Paneer, Dahi, Lassi, Chakka, Shrikhand,

Amrakhand&othersweets and sellingatowncounter ‘EkataDairy’ atBhagur. Daily 400 lit milkisbeingused for preparation of milkproducts and 600 lit milksold as liquidmilkatowncounter and home delivery. Remainingmilkissupplied to privatemilkprocessing plants. Purchasedmachineryviz. Milk analyzerwith computer software, Khoa machine, Shrikhand machine. Providedemployment to 10unemployed youths@ Rs. 6000 to 7000 per month. Milk is being collected from 70 milk producers at only one collection center and stored in two bulk coolers with 500 lit capacity each. As incentive gifts are given to milk producers on occasion of Divali festival. Future plan is to start own milk pasteurization plant.



**d. ‘Kisana Dairy’:**

Mr. KIRAN KRISHNA JADHAV,  
 Jatwada Road, Radhekrushna Colony,  
 R. H. No. B04, Harsul, Dist: Aurangabad  
 Mob. No. : 9404590071

After completion of the training unemployed Mr. KiranJadhav worked in a private outlet for six months for gaining an experience and then started his own dairy outlet at Aurangabad as ‘Kisana Dairy’. Starting with per day milk collection of 30 lit he has increased it up to 500 lit within three years. Milk is being collected from farmers in nearby villages which is taken care by his brother. Daily 50-100 lit milk is used for preparation of milk products and 400-450 lit sold as liquid milk at own counter and as home delivery. ProducingBasundi, Khoa, Peda, Barfi, Gulabjamun, Paneer, Dahi, Lassi, Chakka, Shrikhand, Amrakhand, ghee &othersweets and salingatowncounter Purchasedmachineryviz. Gerber centrifuge for fat testing, Lactometer&accessories, Deepfreeze and equipments for collection of milk.Future plan is to establish own brand of Lassi&Shrikhand.

**9. Additional information**

**a. List of project partners:**

- Krantisinh Nana Patil College of Veterinary Science, Shirval, Dist: Satara, Maharashtra.

- Maharashtra Animal & Fishery Sciences University, Nagpur, Maharashtra.
- Department of Animal Husbandry, Dairy Development & Fisheries, Govt of Maharashtra.
- Ministry of Agriculture & Co-operation, Government of India.

b. Links to presentation on slide share:

<https://www.slideshare.net/search/slideshow?searchfrom=header&q=succes+story+of+rky+project+on+milk+processing>

c. Contact person for this story:

Dr. Kadam B. R.,  
Principal Investigator &  
Assistant Professor of Livestock Products Technology,  
Krantisinh Nana Patil College of Veterinary Science, Shirval, Tal: Khandala,  
Dist: Satara, Maharashtra  
Mob no. 9762505866, E-mail id: brkadam\_vet@rediffmail.com

#### 10. Checklist:

No.	Question to consider	Yes	No
1	Is the story interesting to the Target audience of the project/activity report?	Yes	
2	Does the story explain what new insights the project brings? What is the main lesson learned from this story? Does the story describe a key insight on what works and what doesn't and something that future projects could build on.	Yes	
3	Does the story describe the outcomes the project produced and people who are benefitting? What changes- in skills, knowledge, attitude, practice, or policy- has the project brought about and who is benefitting from these changes?	Yes	
4	Does the story make a compelling point that people will remember? Does the story show how the project makes a difference to improving livelihoods and lessening poverty?	Yes	
5	Does the story provide an interesting fact that people will remember? For example how the yields increased, how mane hectares of land could become more productive from this innovation or technology?	Yes	
6	Does the story explain what kind of impact this innovation or technology could have if scaled up?	Yes	
7	Does the story show which partners contributed and how?	Yes	
8	Does the story include quotes from stakeholders or	Yes	



	beneficiaries?		
9	Have I provided links to other media that also feature this story?	Yes	
10	Have I provided the contact details of people who can provide more information?	Yes	

\*\*\*\*\*