Skilling women in modern fish drying practices and impact on employment and income





Under

Scheduled Caste Sub Plan (SCSP)

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Introduction

- The fisheries sector plays an important role in generating income and employment among the coastal population, especially to the women who belong to the weaker section of society.
- Drying fish and shellfishes using renewable energy such as solar energy is environmental friendly and has less environmental impact
- Providing skill development training on hygienic fish and shellfish drying using Solar cum electric backup dryer makes them self-employed specifically in rural areas, where other employment avenues are scarce.

Introduction

- A survey was conducted on women beneficiaries who participated in the hands-on training cum demonstration program conducted by the ICAR-CIFT in collaboration with KVK Sikkal, Nagapattinam district of Tamil Nadu.
- Even though large number of coastal rural women joined and working under the MGNREGA scheme were getting 100 days employment, increased income, spending, saving, reduction in indeptness create positive impact on income and employment.
- This coastal district is abundant with fishery resources with bulk landings ensuring availability of fish all around the year.

Introduction

- The economics of operation was calculated for the drying unit using capital investment made solar cum electric backup dryer of 10 kg capacity.
- The enhanced income due to hygienic drying processes of locally available fishes *(Mackerel, Ribbon fish and Anchovy)* and shellfish *(Shrimp)* following strict protocol on cleaning, drying, packaging and marketing dried fish and shellfishes into the nearby markets as well as the KVK sale counter was estimated.

Transfer of Solar Fish dryer Technology & Processing items to KVKs

MOU signed between ICAR-CIFT, Kochi and various coastal KVKs under SCSP scheme

10Kg capacity of solar cum electric backup fish dryer installed & Model Mini Fish Processing unit items to the KVKs .

This were mainly utilised for developing value added fish products through technology demonstrations and skill-based training programmes conducted at KVK premises.

Beneficiaries such as small-scale fishers, primary processors and entrepreneurs as a part of their income and livelihood generation activity.

Mini Fish Processing Unit (MFPU)

Under ICAR-CIFT (SCSP)

Training Inauguration by the KVK Sikkal, Nagapattinam

The trainees are keeping the pre-processed shrimp into the ICAR-CIFT solar cum hybrid dryer

Hygienic way of preparing fish and shell fishes products

Mozhithidal, Sikkal, Nagapattinam

Name : R. Krishnaveni
Age: 43
Education: B.Sc.,

Name : M. Radha
Age: 44
Education: High School

Name : S. Rani
Age: 45
Education: High School

Name : A. Poonkodi
Age: 42
Education: High School

Name : G. Pavunammal
Age: 55
Education: Primary school

Name : V. Saroja
Age: 48
Education: Primary school

Hybrid solar cum electric back up dryer

- Most of fish are consumed as fresh fish, 15 to 20 percent are dried form
- Coastal women are more involved in the post harvesting aspects of fishes especially marketing - fish processing activity especially fish drying
- Earlier low value fishes in landing centre and fish waste generated in the marketplace are simply go for open sun drying bulky and send it to the fish meal units at lower quality of fish.
- Drying is an important post-harvest preservation technique. Solar energy based drying techniques offer better return on investment.
- An economic analysis and feasibility of a 10kg capacity hybrid solar dryer operating at 55-60 degree Celsius
- During the drying period, maximum efficiency, minimum moisture content at ambient temperature and humidity should be considered.

Benefits of hybrid solar cum electric back up dryer

- It is cheap, more efficient and multi-purpose in use, act as income generation to the coastal area fisheries folk households.
- Produce better quality dry fish products in terms of hygienic and healthier product
- Reduces fish losses and getting better price to the products.
- Overnight drying even during rainy days.
- Reducing conventional fuel demand such as kerosene, firewood, charcoal etc can result in significant cost savings.
- Drying materials at optimum temperatures and in a shorter amount of time enables them to retain more of their nutritional value.
- Since materials are dried in a controlled environment, they are less likely to be contaminated by pests, and can be stored with less likelihood of the growth of toxic fungi.

Results

- Average trained women entrepreneur selling dry fish worth of 1.7 lakhs for 200 days
- Average operational expenditure for drying fish and shell fishes using solar dryer is calculated about 1.35 Lakhs
- Average profit obtained is about Rs 35,000 for 200 day
- In addition to get annual income of Rs. 10,000 from MGNREGA (100 days employment).
- After technological intervention like Training on hygienic dry fish production with maintain proper quality standards while dry fish preparation process now she is getting annual income of Rs. 45000 per annum
- Apart from that they can earn through work as agriculture labour

Results

- Various GoI scheme such as STEP, Rashtriya Mahila Kosh (RMK), Kishori Shakti Yojana, Mahila Shakti Kendra provide vocational training to women to develop skill and make them self employed
- Under SCSP scheme provide training cum demonstration to SC category beneficiaries for their upliftment.

THANK YOU

to delegates and all
my participants