



WELCOME

Challenges Faced by Fisher women of South India Specific Reference to Andhra Pradesh

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Background

- **State Government wants to know the problems faced by the fisherwomen in Andhra Pradesh to take some policy decisions.**
- **Based on my earlier experience The University supported to find out the ongoing challenges**

Methodology:

Detailed surveys were conducted in selected fisher villages.

- **Information on Fishing Activities of Women**

- **In the 9 coastal districts of Guntur District**

- **4 sea coast Mandals namely Bapatla, Pittalavari Palem, Nizampatanam, and Repalle.**

- **With one Preschool Child**

- **30 Families from each Mandals (120 Families)**

Fishing activities of Women:

Marketing ---- 31%
Sun drying---- 31%
Salting-----31%
Netting -----40%
Any Other (Agricultural Work)-
----88%.

Studies on fisher women in coastal ecosystem of Andhra Pradesh, Karnataka, Kerala and Tamilnadu

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Women is an economic partner to men, besides biological and social roles performed. Women too is equally endowed with the required qualities and managerial abilities that matter in successful entrepreneurship. The statuesque is gradually changing and time has come when one starts thinking, exploring and working towards the women entrepreneurship



Dr. Vijaya Khader
Dean faculty of Home Science &
Principal Investigator NATP



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Objectives

The major thrust would be on health, nutritional security, economic empowerment, natural calamity management and entrepreneurial development through self help groups.

Achievements and observations

Studies on fisher women in coastal eco-system of Andhra Pradesh, Karnataka, Kerala & Tamil Nadu and NATP reveal the General information (Macro level information), Socio-Economic Status of Fisherwomen, Nutritional Status of Fisherwomen, Nutritional status of preschool children, Antireceptivity of fisher, women and preschool children, Clinical and nutritional status of fisher women and preschool children Knowledge, Aptitude and practice of Nutrition, Health and hygiene, Participation of woman in post harvest fisheries sector

Development of educational materials

CDs development, Pamphlets, Folders, Flash cards, Brochures

Fabrication of Equipment & Patents

Low cost ice-cream freezer, Multipurpose fresh fish vending & display table

Income generation activity & Technologies Developed

Mushroom cultivation, Fabric painting, Value addition
Value addition to fish & prawn products, Artificial pearl culture, Processing of salt fish, Mushroom cultivation, Alternative use of millets

Policy recommendation

The employment and income potential existence in the Fisherwomen production, Fish processing, Non - fishery related income fields can be explored to provide training in alternate income generating activities to fisherwomen

Success stories

Mrs. Theerala - Kerala : Now she could earn an amount of Rs.10000/- per month from calm processing and vending.
Smt Banumali Karkas - Elevated from fish vending to ice plant ownership
Smt.P.Roopavathy, Kovalam fishing village, Kanchipuram : Venturing into small time business like fish vending, live fish trade and cured fish sales

THE TEAM

Name of PI & CCPI of the centres

LEAD CENTRE

Department of Foods & Nutrition
F.G. & R.C., Rajendra Nagar, Hyderabad

Dr. (Mrs.) Vijaya Khader

Dean Faculty of Home Science & Principal Investigator

CO-OPERATING CENTRES

ANDHRA PRADESH

College of Fishery Science, Muthukur
Mr. K. Ghansagar Dr. Ms. J. Lakshmi
Asst. Prof. & CCPI Asst. Prof. & CCPI
Muttukur Sapatla

Central Marine Fisheries Research Institute, Kottuvada
Dr. E. Narayana Kumar
Sr. Scientist & CCPI

KERALA

Central Marine Fisheries Research Institute, Cochin

Dr. E. Sathya

Principal Scientist & CCPI

Dr. (Mrs.) Faima

Technical officer CCPI

KARNATAKA

College of Fisheries Science, Mangalore

Sri R.S. Sudhakar

Professor & CCPI

TAMILNADU

Central Marine Fisheries Research Institute, Chennai

Dr. H. Mohamad Kader

Principal Scientist & CCPI



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MULTIPURPOSE FRESH FISH VENDING AND DISPLAY TABLE



- There is a considerable demand for fresh fish in India, as much as 70% of the marine fish landed is sold as fresh and almost the entire quantity of fresh water fishes are consumed as fresh.
- There is a need to improve the infrastructure at markets facilitating the retail fish traders in maintaining the quality of fish and realize better price, the consumer in turn is benefited with better quality fish.
- From the table it is evident that fresh fish can be kept for over two weeks in good condition at 0°C.

Cost of the equipment if Rs.3,950/-



LOW COST ICECREAM FREEZER



The following are advantages of the instrument.

- **The cost of the equipment is low (Rs.4,000/-)**
- **No technical know-how is needed**
- **Labour is not required as in the traditional ice-cream making**
- **Ice cream can be prepared by a lay man also**
- **Capacity per batch is 4.5 – 6 lts.**
- **Time required per batch is 5-7 minutes.**



Women play a vital role in the operation of India's fisheries and aquaculture industries.

Activities of Women in Fisheries

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graph TD; A[Activities of Women in Fisheries] <--> B[Clam collection<br/>Prawn Seed Collection<br/>Sorting<br/>Marketing]; A <--> C[Aquaculture<br/>Fish farms<br/>Shrimp farms<br/>Shrimp hatcheries]; A <--> D[Labour at landing centres<br/>Loading ice to boat<br/>Unloading fish from boat<br/>Loading fish to tempos<br/>Sorting of fish]; A <--> E[Traditional fish processing<br/>Salting and drying of fish]; A <--> F[By Products units<br/>Fish meal<br/>Oil<br/>Liver oil units<br/>Manure]; A <--> G[Processing plants<br/>Peelers<br/>Graders<br/>Packers]; A <--> H[Dressing of fish<br/>Surimi Units];
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Clam collection
Prawn Seed Collection
Sorting
Marketing

Aquaculture

Fish farms
Shrimp farms
Shrimp hatcheries

Labour at landing centres

Loading ice to boat
Unloading fish from boat
Loading fish to tempos
Sorting of fish

Fresh Fish Marketing

Traditional fish processing

Salting and drying of fish

Dressing of fish

Surimi Units

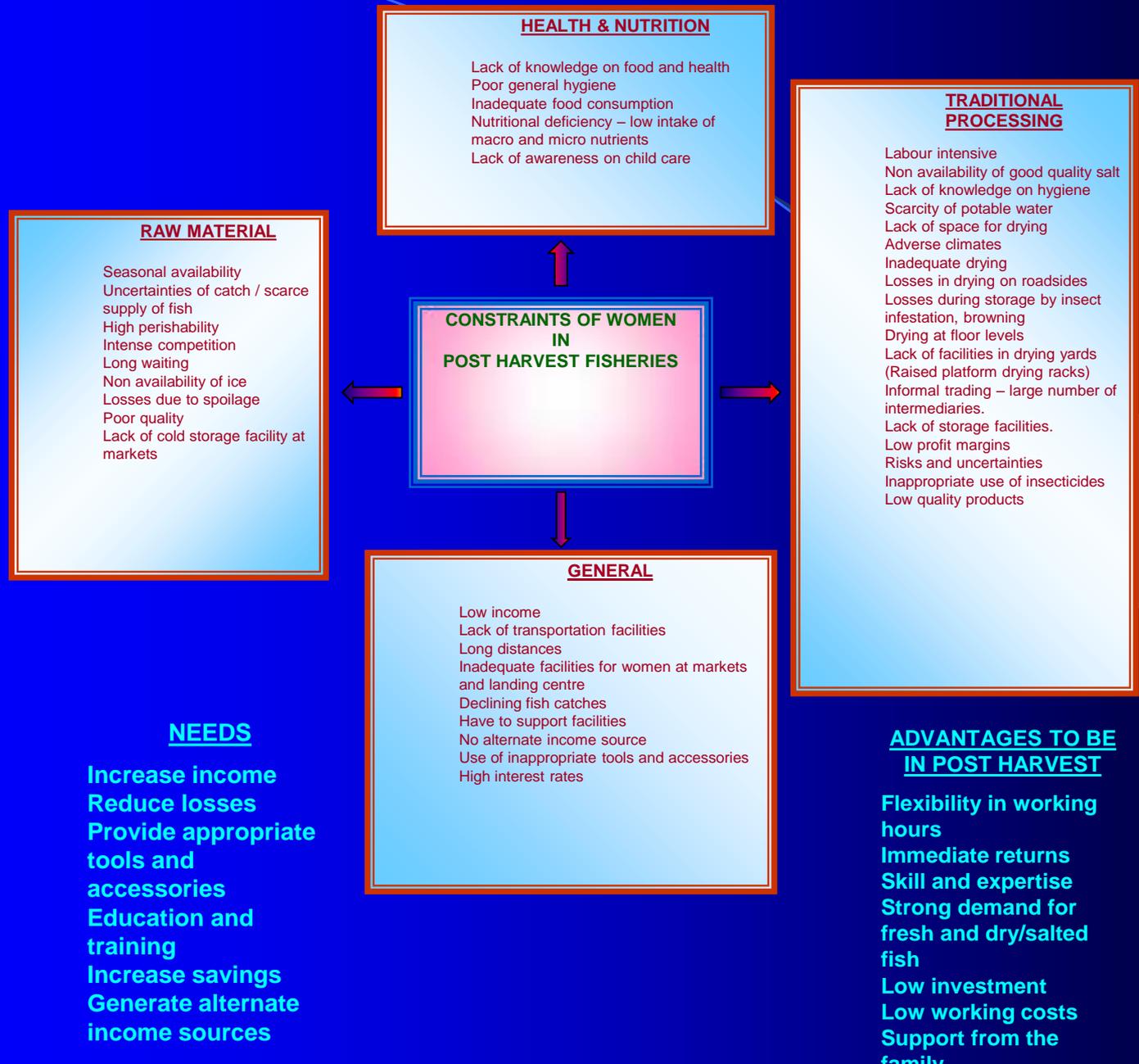
Processing plants

Peelers
Graders
Packers

By Products units

Fish meal
Oil
Liver oil units
Manure

Constrains of women in post harvest fisheries



Vital Role of Fisher Women:

- Fisheries in India account for 2.5% of the gross domestic product
- Generate powerful income and employment
- Play a vital role in the operation of fisheries – continuing growth as a component of Agriculture Sector of the economy.
- Postharvest Handling; Preservation;
- Processing; Marketing of seafood's;
- Provide an interlink between Producer & Consumer.

Regional Opportunities:

**Fresh Fish marketing & Traditional Fish Processing – Preferred
Activities: Clam collection & processing; Fish Processing; Fish & shrimp
Farms & hatcheries
Prawn seed Collection
Salt Loading
Byproduct units**

Constraints:

**Many suffer from poor health, Hygiene & Nutrition
Lack of Education, Child Care Transportation
Uncertain Catches with varying Quality, highly perishable, lack of cold
storage & Intense competition**

**Scarcity of Potable water,, space for Dry, Adverse weather condition,
loses through insect infestation, Product Quality issues, low profit
margins.**

**Lack of Storage facility , Health Hazards, long hours of working in hot
son, walk long distances with head load, Back aches, head Aches, Chest ,
Shoulder, Joint and muscular pain, Skin infections Breathlessness**



Mussel Culture





**FISHERWOMEN
ATTENDING A LECTURE**



**TRAINING ON FRUIT
PRESERVATION**

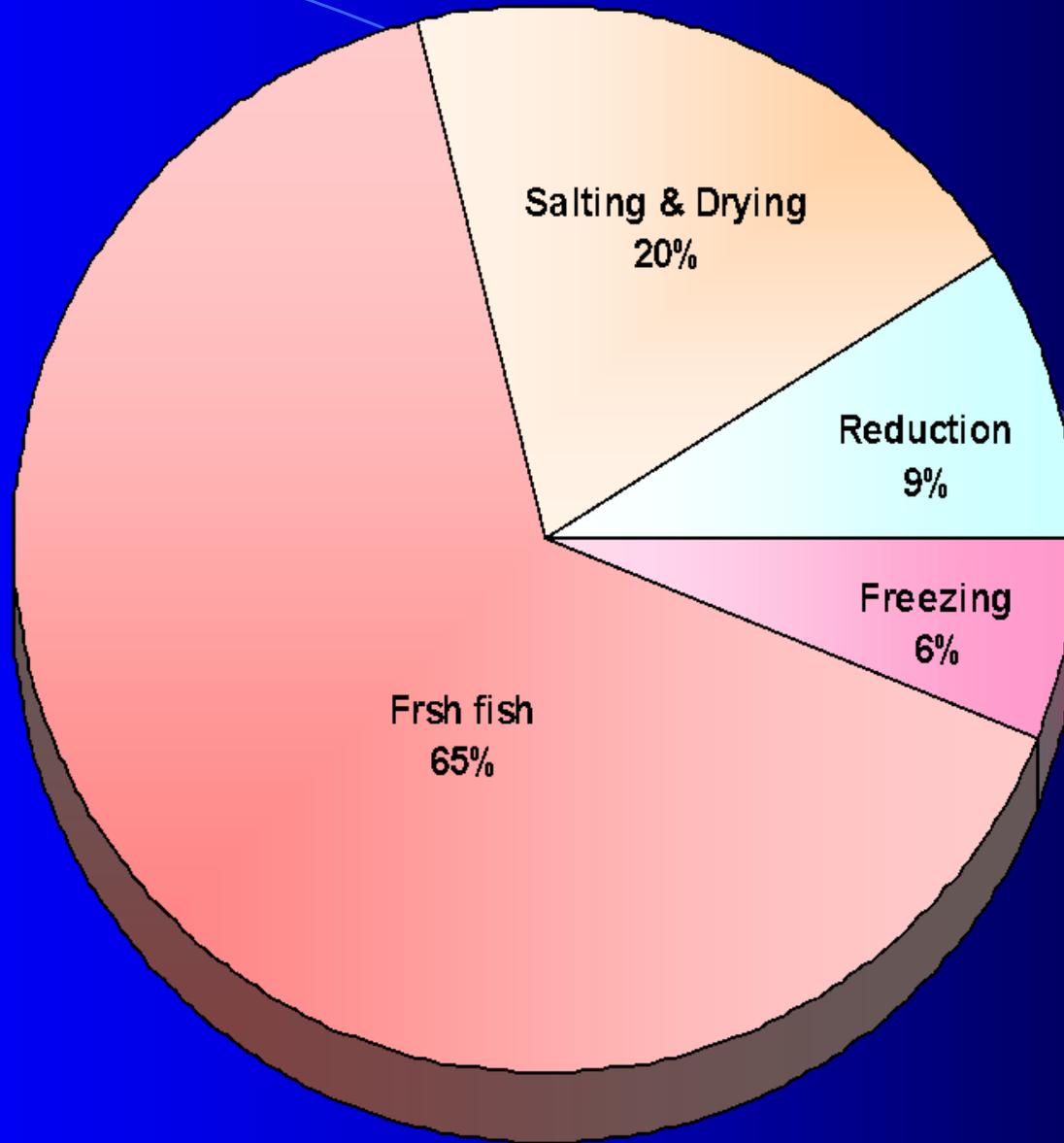


**TRAINEES WITH ALL
PREPARATIONS**



**FABRIC PAINTING IN
PROGRESS**

Fish utilization trend in India



TRAINING PROGRAMS



RESULTS

Geriatric foods/ Malted infant food/ Amylase Rich foods/ Therapeutic foods/ Weaning foods, Value addition to fish & prawn products/ artificial pearl culture/ Processing of salted fish was used.

Home based low cost energy protein rich preparations using Horse gram (*Dolichos Biflorus*) for vulnerable groups

Financial support : ICAR

Ragina : [Germinated ragi flour 40g+ puffed horse gram flour + jaggery 35 g + crude red palm oil 5 g)

EPRF : [Dehusked roasted horse gram flour 40 g + Dehusked roasted soya flour 20g +jaggery 35g+ crud red palm oil 5g)

This horse gram which is commonly used for cattle feed can be diversified for human consumption with less investment.

Therapeutic food supplementation in ICDS projects of Andhra Pradesh

Financial support : World Bank

3 types	Sweet Ready Mix (SRM) Therapeutic Food (TF) Therapeutic food with amylase rich flour	} To reduce grade III and Grade IV malnutrition pre-school children in rural and tribal areas.
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Supplementary food of 70g (cereal, pulse and oil seed combination) meet the nutritional requirements of a pre-school child.

Feeding carried out on 2267 children of age range of 1-3 years.

100 g of supplement provides: 400 to 480Kcal 12.5 to 13.8 g protein

To study the effect of feeding malted food on the nutritional status of vulnerable groups

Financial support: Department of Biotechnology

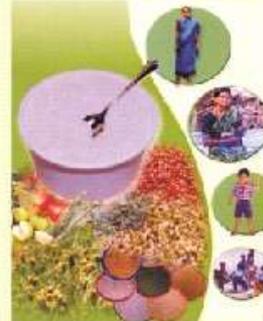
Amylase rich malted mixes (ARMM) are 2 types namely using ragi/wheat

Pre-school children 400

Pregnant women 100 3 months

Lactating women 100

Promotion of malt based small scale food industry not only provides opportunities for rural women to develop entrepreneurship and employment but, also provides food and nutritional security through income generation.



PATENTS RECEIVED

Fresh Fish Vending & Display Table



License the technology (to Woman Entrepreneur) Smt. G. Yashalakshmi W/o Sri. G. Satya Kiran, M/s Yagi Industries, Secunderabad

Mrs. Lakshmi Bhuvanawari W/o Devi Hariprasad, D.No. 23/121, Bachupeta, Hindu College Road, Machilipatnam-527001

Low cost Ice Cream Freezer



TECHNOLOGIES DEVELOPED

- Value addition to fish & prawn products
- Artificial pearl culture
- Processing of salt fish
- Mushroom cultivation
- Alternative use of millets

Television programme to create awareness

a) **Rytu mitra phone in programme (live telecast)**

- Mushrooms for 30 minutes on January 2002
- Food adulteration and health for 30 min. on March 2002



b) **Interview programme on Doordarshan under Gramadarshini programme**

- Mushroom cultivation for 18 min on September 2001
- Millers -Nutritive value 14 min. on May 2003

Success stories/Role models (Documented)

SUCCESS STORIES

Mrs. Theresa

A successful clam processor cum-vendor at Thekkumbhagam in Kollam District. Now she could earn an amount of Rs 10,000/-pm from clam processing and vending. This income supplements the income of her husband from fishing activities. Her message to the society is "IF HARD WORK AND PERSEVERANCE IS THERE, WOMEN CAN REACH TO ANY LEVEL".

Mrs. Amalorphavam

An enterprising fish vendor at Poovar in Thiruvananthapuram District (Kerala). The daily earnings range from Rs 100-500. She is a member of Self Help Group (SHG) of Poovar and commanding reasonably good respect among the neighborhood. Amalorphavam is a happy woman now and strongly suggest that "WOMEN IN FISHING VILLAGES CAN EASILY TAKE UP FISH TRADE OR DRIED FISH TRADE AS AN OCCUPATION".

Mrs. Bhageerathy

Fishing-cum-marketing as a family enterprise (Kerala), her earning range from Rs. 15,000 – 20,000 / Month. Bhageerathy states that women in fisheries sector can always play a key role to supplement the family income. They can always promote the habit of savings and this will help the family to tide over the lean season and also make appropriate productive investment. She feels that "FISH TRADE ALWAYS FORM THE EASIEST AND ALTERNATIVE EMPLOYMENT AVENUE FOR FISHER WOMEN OF COASTAL REGION".

Smt. Banumati Karkera

From fresh fish vending to ice plant ownership (Karnataka), her earnings on an average Rs.

SUCCESS STORIES

30,000/- Month. The high demand for fresh fish in Kerala state made her expand her territory as far as Kasargod, Cannonore and Calicut. The demand and cost of ice was high. This made Banumati to think about starting a Ice Factory. Though she was reluctant initially, with encouragement from her family members and bank, she established "Gojanana Ice and Cold Storage" with a capacity of 15 tonnes per day at Hoige Bazaar about 2 Kms from Mangalore fish landing centre. Smt. Banumati attributes her success to hard work and her will to cross all hurdles with a desire to earn more.

Smt. Hemavathy Puthran (Karnataka)

Following the footsteps of her mother in dried fish marketing. Getting more than Rs.40,000/ Month. Hemavathy was introduced to traditional processing of fish by her mother Sheshamma. Since then, she is processing all types of fishes. Fish varieties mostly used by her are Mackerel, Sardine, Soles, Anchovies, Small sized Shrimps, Silver belly and lizard fish. Hemavathy feels happy. By following the footsteps of her mother she has achieved what she wanted and she is proud of her profession as she could give employment to five members.

Smt. P. Roopavathy

Kovalam fishing village, Kanchipuram (Tamil nadu), getting Rs. 12,000 – 15,000/-Month. She has studied up to eighth standard and she had an opportunity to work as an enumerator for a research project of the institute. At that time, her talents were identified by the project leader who initiated the survey. She was motivated to form a SHG comprising women of similar interest. But the picture was not rosy and there were many

SUCCESS STORIES

objections to her. But she overcomes the objections with the help of the awareness meetings organized by Dr. H.M. Kasim, CCPI, Chennai about the importance and advantages of the self help groups. Now many women joined the SHG and Smt. Roopavathy became a trusted leader of that group and she is the secretary of the SHG. Thus a shy and introvert Smt. Roopavathy has transformed herself into a leader and organized which not only helped to improve the socio-economic status of other family and also of other members of her village. Yet it is very much fitting here to quote her as one of the role model for the fisher women.

Smt. Gapala Pentamma

Mypadu of Uppada hamlet of Kakinada (Andhra Pradesh), getting Rs. 30,000 / Month. With the financial assistance she started a small net making unit in her hut by employing three fisher women at a wage rate of Rs 40/- per day. Her interest, hard work and motivation by the institutional organizations saw her emerge as a successful entrepreneur from an average individual. She has some aspirations like diversifying her enterprises in value added fish products after getting trained in that field. She is also seeking financial help to attempt the new ventures.

SHG fisher women of Andhra Pradesh-East Godavari, West Godavari, Prakasham District (9 villages); Karnataka - Dakshina Kannada, Udipi Districts (6 villages); Kerala - Alopuzha, Kollam (5 Villages); Tamilnadu-Chennai, Tuticorin District (6 Villages) are using the technology regularly for economic enhancement were showed the visibility of economic enhancement.

ACKNOWLEDGEMENTS

I express my sincere thanks to World Bank, ICAR & NAIP for their financial support during the project period

& College of Fishery Sciences, Muthukur, College of Home Science, Bapatla, CMFRI- Chennai, CMFRI-Cochin and College of Fisheries, Mangalore for their cooperation, support given in successful and smooth running of this project.

Round Table Conference With Mrs. Laura Bush on Economic empowerment of Women (March, 2006)



Visit of Chief Minister of A.P. Dr. Y. S. Rajashekar Reddy & Honble President of US Mr. George W Bush



Eminent Woman Scientist Award (12-10-2012)

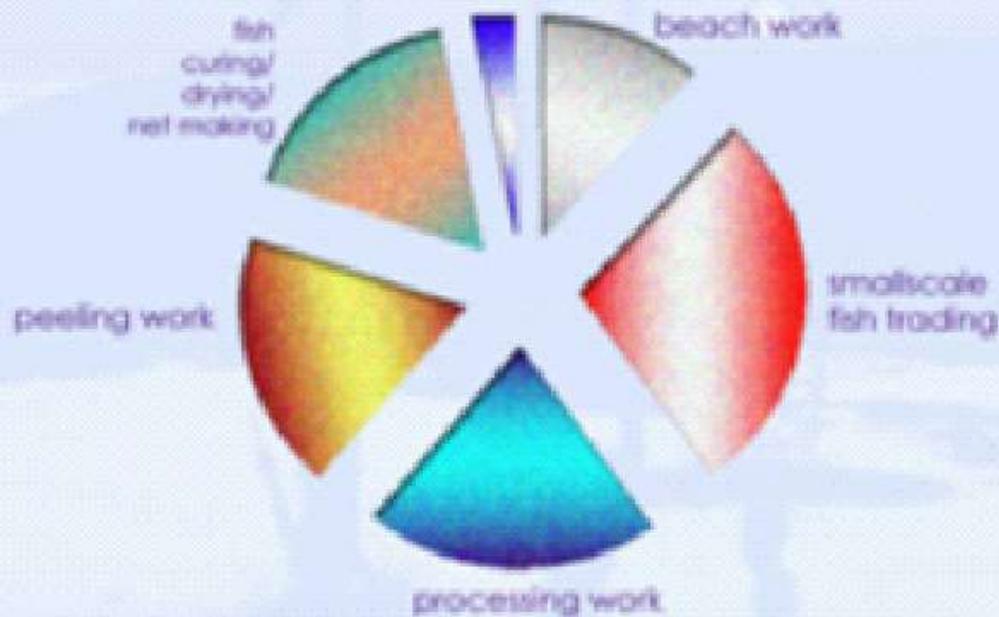


CONCLUSIONS

The above fisher women have attained the training and awareness from National Agricultural Technology Project, implemented in their places and enhanced their socio-economic status through various skill oriented training programmes and continuous day-to-day discussions with the scientists.



OCCUPATIONAL PATTERN OF FISHER WOMEN





Women in Post-Harvest Fishery

- **Once the fish are landed**
- **They take charge of it regarding sales**
- **Drying and processing and related aspects**
- **Their efforts have not been quantified effectively so far.**



Technologies developed

- * Value addition to fish & prawn products
- * Artificial pearl culture
- * Processing of salt fish
- * Mushroom cultivation
- * Alternative use of millets



Constraints:

Many suffer from poor health, Hygiene & Nutrition

Lack of Education, Child Care, Transportation

Uncertain Catches with varying Quality, highly perishable, lack of cold storage & Intense competition

Scarcity of Potable water,, space for Drying, Adverse weather condition, loses through insect infestation,

Product Quality issues, low profit margins.

Lack of Storage facility,

Health Hazards, long hours of working in hot sun, walk long distances with head load,

Back aches, head Aches, Chest , Shoulder, Joint and muscular pain, Skin infections Breathlessness

Care Required:

**Socio Economic Empowerment
Education about Nutrition,
Health, Sanitation, Child Care,
Current technologies,
Best Practices Techniques.**

The Vulnerability of Fisher Women

- 1. Education and training**
- 2. Poor Housing and Sanitation**
- 3. Health: Nutritional Food is a vital factor determining health.**
- 4 . Physical mobility**
- 5. Access to credit**
- 6. Marketing Problems**
- 7. Entrepreneur Development Program**
- 8. Impact of technology**

Problems

- The socio-economic conditions of the fisher women have been neglected.
- Better marketing facilities for fish venders.
- increase the purchasing power
- To educate the fisher women on small family norms.
- Processing low cost fish in to value added
- Extensions programs for farm women should be one of the target groups.
- Cooperatives may be organized for women engaged in processing and trading of fish
- Properly trained and educated women should be deployed as link workers

The fishery sector has witnessed serious crises during the last decade problems like

- **lack of finance,**
- **lack of storage facilities and quick delivery of input,**
- **lack of ice-plants, lack of awareness of market information,**
- **uncertain quality of fish, faulty measurement system,**
- **lack of market infrastructure,**
- **imbalance between demand and supply of fish,**
- **low level of education among fishermen,**
- **and lack of availability of other and alternative profitable occupation**
- **inadequate income and relatively high level of expenditure**
- **extremes of climate,**
- **natural calamities like floods and draught, the tsunami,**
- **lack of appropriate policy measures,**
- **weak organizational structure of fishermen cooperatives,**
- **failure of the cooperative system,**
- **lack of transportation facilities, and the like.**

Recommendations

Training program for Empowerment (Economically, Socially & Political)

Product Development through Formal Training

Training in efficient utilization of Fisheries Resources

Training of master Resource Persons from existing Fisher Women

Employment generation

Basic Principles of Hygienic handling

Keeping Quality & Marketability

Imparting Locally relevant economically Viable Technologies

Government to set up Marketing ,Cold Storage facilities

The Happy Balance Sheet of Life:

8 F----- Faith, Family & Friends

8 H----- - Health, Hygiene & Hobby

8 S ----- Social , Service & Smile



➤ Promotion of malt based small scale food industry provides

➤ Entrepreneurship

➤ Employment

➤ Food and Nutrition security through income generation





Thank you

