



COMMUNITY SMOKING OF FISH

A sustainable livelihood approach for tribal fisherfolk



Krishi Vigyan Kendra, Lower Dibang Valley

Arunachal Pradesh



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FOREWORD

Fishery is one of the fastest growing enterprising sectors in India, which contributes 1.1% to national GDP and 5.15% to agricultural GDP of the country. India, being the second largest country in fish production (capture and culture) globally, today boasts of its status next to China in the world as the second largest aquaculture nation with a remarkable growth of about 18.86% in overall fish production in comparison to last three years, where inland fish production has registered a growth of more than 26%. But India tops the list with an average annual growth rate of 14.8%.

In fact, fishery is a sunrise sector with varied resources and potential, supporting the livelihood source of over 15 million people at the primary level and many more along the value chain. Transformation of the fisheries sector from traditional to commercial scale has led to a quantum jump of fourteen-fold increase in fish production from 7.5 lakh tonne in 1950-51 to touch the figure of 11.41 million tonnes (2016-17, while the export earnings from the sector registered to be Rs. 37,871 crores (US\$ 5.78 billion) during 2016-17, which is the highest ever export from the country so far. Globally, the value of export of annual fish products ranges from 85 to 90 billion dollars. In addition, more than 25% of the world's protein diet is obtained from fish and human population consumes more than 100 million metric tonnes of fish per year in the form of food.

The Tribal Belt of Northeast India include Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura; where in Arunachal Pradesh the Idu Mishmi tribe of Dibang valley are supposed to be one of the first settlement in the hills of Himalayas. Fish plays an important role, both in the diet as well as various rites and rituals of Idu Mishmi community. Fishing includes preying of other aquatic living under water like

prawns, frog, snakes, crab etc. Fish has been taken at too many aspects of daily living, especially in festive season without fish there are no function to be witnessed. Fish are mostly taken as smoked (angakoo) or fermented (anga-desa) form. Harvested fishes cannot be kept fresh for a longer period as they degrade fast within 6-10 hrs after collection. Due to the lack of modern storage facilities in tribal localities, the local tribal employs traditional methods such as drying and smoking storage techniques that are found to be most reliable. Smoking is the easiest and common method of preserving fish practiced by local people. However, due to crude method of smoking that do not eliminate the toxic substances in the smoke, their consumption is believed to be the cause of acidity and gastric problem common to the tribal people of Arunachal Pradesh. Hence, ICAR-CIFT evolved modern technology of smoking kiln can help the tribal to restore the quality of fish in term of taste and delicacy and also reduce the risk of health problems arise due to toxic substances released during traditional smoking.

In this context, Community Fish Smoking Kilns popularly known as "CoFiSKi" designed and developed on the recommendation of ICAR-CIFT based on regional requirements has brought a radical improvement in the conventional smoking techniques. In this context, this publication entitled "Community Smoking of Fish -A sustainable livelihood approach for tribal fisher folk" prepared by Krishi Vigyan Kendra, Lower Dibang Valley, Arunachal Pradesh with the collaboration in Mumbai Research Centre of ICAR-CIFT, ICAR-CIFT, Cochin will cater the need of stakeholders in the field of fish processing. This manual is the outcome of the efforts of the experts in the field and contains updated protocols depicted as flow charts which can be easily understood by the reader.

I compliment the noble endeavour of Mumbai Research Centre of ICAR -CIFT and KVK, Lower Dibang Valley to bring out this publication that will act as a guide for the field extension functionaries to extend their support to the fisher folk for sustainable livelihood security.

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Dr. Ravishankar C. N.
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Index

Topics	Page No.
Foreword	III
Processing of fish by Idu Mishmi tribe	6
<i>Riya Tapo</i>	
Community Fish Smoking	13
<i>Jimmy Mize, T. J. Ramesha and L. N. Murthy</i>	
Fish Balls	17
<i>Jimmy Mize, T. J. Ramesha and L. N. Murthy</i>	
Fish Cutlet	21
<i>Jimmy Mize, T. J. Ramesha and L. N. Murthy</i>	
Fish Finger	23
<i>Jimmy Mize, T. J. Ramesha and L. N. Murthy</i>	
Fish Pickle	25
<i>Jimmy Mize, T. J. Ramesha and L. N. Murthy</i>	