NATIONAL WORKSHOP\_

# ENTREPRENEURSHIP DEVEDOPMENT DUCK FARMING WEBINAR

NCDC MORD ICAR BIHAR GOA KERALA MANIPUR

## JUL 22nd, 11 AM 1ST

Zoom ID will be sent to your emails Key Speakers Register https://webinar.ncdc.in

Mrs Nemcha Kipgen, Minister, Manipur Mr NN Sinha, Secretary, MoRD, Gol Mr Sundeep K Nayak, MD, NCDC Dr. B. N. Tripathi, DDG (AS), ICAR Ms Bandana Preyashi, Secy Coop, Bihar Mr C. R. Garg, Secy Coop, Goa Ms Tinku Biswal, Secry AH, Kerala Dr Sunil Giri, Pr Scientist, CARI, ICAR

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#### CONCEPT PAPER

#### WORKSHOP ON ENTREPRENEURSHIP DEVELOPMENT THROUGH DUCK FARMING

#### INTRODUCTION

Ducks are one of the important types of poultry. They belong to the waterfowls group which is closely related to geese and swans. Ducks are identified by their characteristic features such as broad bill and webbed feet. Widespread in various types of aquatic habitats, ducks mostly breed in freshwater bodies such as shallow lakes, marshes and swamps. They are believed to be domesticated in Southeast Asia some 4000 years ago. Since then, they have been used for their meat, eggs and feathers. Ducks are also used for decorations purposes, for clothing, controlling water snails in rice fields and as a game animal. Grazed domestic ducks act as natural predators against insects, slugs and snails. They feed on grain which is lost during post harvest practises and act as provider of natural fertilizer in rice fields with their manure which contributes to higher yields. Ducks have a distinct advantage over other form of poultry as they are excellent foragers, are easy to herd as they tend to flock together and have a relatively higher disease tolerance capacity. Breeding and selection has led to the improvement of duck breeds. Pekin ducks, Muscovy, Khaki Campbell, Indian Runner and mule ducks are among the duck breeds popularly raised for their meat and eggs.

Duck meat and eggs are an important source of protein and iron. Duck eggs contain all essential amino acids required in the human diet and are a good source of vitamins and minerals. Due to lower water content, they are more nutritious than chicken eggs. Duck meat is consumed in various parts of the world because of its high nutritional value with complete essential amino acid and good fatty acid composition and a high percentage of polyunsaturated fatty acids. Tracing far back to 600 years ago in history, Peking duck meat formed part of the main dish of the Chinese Emperor. Today, duck meat is still very popular especially among many Asian countries such as China, Hong Kong, Japan, Korea and Taiwan.

#### **GLOBAL SCENARIO OF DUCK FARMING**

Duck production statistics across the world have shown an upward trajectory in recent times. FAO statistics reveal that duck meat production across the world increased by 153% from 1.74 million tons to 4.39 million tons between 1993 and 2013. In 2013, 68% of the total produced amount of duck meat originated from the Asian countries, which tripled their production from 982 thousand tons to 2999 thousand tons. The increase in demand for duck meat can be estimated from the 2017 FAO data which says that its import increased from 81 thousand tons to 187 thousand tons (+130%) in the last two decades across the world. China, Germany, Saudi Arabia and France are the major markets for duck meat and eggs. Taiwan exports more than USD 130 million worth of down feather products annually. Today, duck products are still very popular and remain in strong demand, particularly in Asia. A study comparing the growth of various

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poultry meats reported that duck meat had the highest growth (67%) as compared to chicken meat (53%), turkey meat (13%), chicken eggs (39%) and other eggs (27%) over a 10 year period from 1995 to 2005. In 2016 the duck population throughout the world reached 1.24 billion and 1.1 billion (89 percent) were in Asia. The production of meat and duck eggs is still lower than chickens, but ducks make a significant contribution in providing high-quality nutritional food needs. The consumption of duck eggs accounts for around 10-30% of total egg consumption in China and Southeast Asia.

#### **DUCK FARMING IN INDIA**

In India, ducks are reared traditionally by small farmers for their livelihood. They contribute a significant livelihood after chicken farming in the poultry sector. Ducks form about 10% of the total poultry population. The traditional system of duck keeping is still dominant in the country and even after four decades of modernization of commercial chicken production, the duck production in India remains unchanged as a traditional enterprise. Though various duck breeds like Khaki Campbell, Indian Runner, White Pekin and Muscovy are available at different research stations, indigenous ducks varieties are still preferred by the farmers. Also known as desi ducks, indigenous ducks constitute more than 90% of the total duck population and are the second largest species contributing towards egg production in India. As per 20th livestock census (2019), the desi duck and improved variety of ducks contribute 0.89% and 0.26% of eggs respectively to the total egg production. The population of ducks in India grew with an increase of 42.4% in 2019 as compared to 2012. India ranks 8th in the world in duck production whereas China ranks the 1st.

India has an extensive coastal line and substantial inland water bodies which are potential sources for existence of ducks and hence we have a good potential for duck farming. Ducks are mostly concentrated in the Eastern and Southern states, mainly coastal region with non-descriptive indigenous stocks, which are poor layers. West Bengal and Kerala are the major consumer states for duck egg and meat.

#### POTENTIAL OF ENTREPRENEURSHIP IN DUCK FARMING

Globally, the demand for duck meat and egg based products has continued to rise for the last 10 years. The increased consumption of duck meat demonstrates significant growth of duck farming, on the industry and small scale. The growing human population is also expected to lead to an increased consumption of duck based foods. Duck farming in the future is expected to grow in population, feed efficiency, and meat and egg production and low disease incidence. Duck farming requires limited capital investment and it can contribute significantly to food security, poverty alleviation, and ecologically sound management of natural resources in developing countries like India. Access to good duck breeds, appropriate technology, and service support can substantially add to the productivity, income, and food security of the duck farmers.

Duck farming in India has not undergone any process of industrialization or commercialization as that of chicken. Ducks require less expensive and non-

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elaborate housing facilities and can be reared even in backyard of the houses. They need less care and management and get adapted to any environment easily. They are suitable for integrated farming systems such as duck-cum-fish farming, duck farming with rice cultivation. The rising demand for duck meat and eggs can be thrived by implementation of duck farming in coastal areas. Global demand has also opened up an export avenue for duck based products. Organic duck meat and eggs is also a niche but a high value upcoming market. Current trends indicate that the growth and popularity of Duck farming is slow and steady and it can be explored as one of the promising species for future.

The National Action Plan for Egg & Poultry-2022 for Doubling the Farmers' Income by 2022 by the Department of Animal Husbandry and Dairying, operating under Ministry of Fisheries, Animal Husbandry and Dairying reports that there is a significant gap in the requirement of skilled resource persons for some major poultry activities in Duck and Other Alternate Species Farming in the coming years thus indicating that there is a potential for employment generation and enterprise development in this sector.

#### CHALLENGES IN DUCK FARMING IN INDIA

- i. Limited availability of germplasm: Production of germplasm of various duck breeds is limited to meet the demand for foundation of parent stock for commercial rearing as well as backyard practice. On the other hand, in case of repetition of parent stock of a breeding, productivity of the breed gets reduced because of in-breeding depression.
- ii. Inputs Constraints: Duck farmers face difficulty in procuring ducklings and quality feed.
- iii. Financial constraint: Duck farmers rely on egg vendors / private money lenders to meet the operational expenses in duck farming. Institutional financial support is hard to avail.
- iv. Marketing constraint: Lack of awareness and information makes the Duck farmers depend on middlemen for the marketing of eggs. Also, local consumption is less as compared to chicken.
- v. Limited extension services: Training and workshops and extension material for Duck farming is not readily available making it hard to train personnel in this field. Intensive education to empower rural households to increase duck production is limited.
- vi. Migration of birds causes a considerable loss in profit margin
- vii. Application of pesticides in agricultural fields damages the snails, tadpole and earth worm population which is the main protein based feeding resource for ducks.
- viii. Spread of disease: Although relatively more disease resistant as compared to chicken, ducks are susceptible to diseases caused by rodents or old and contaminated equipments. Duck farmers lack awareness about the good production practises which can control these diseases.
- ix. In recent times emphasis is being given to commercialization to increase production and production practises at rural household production and backyard poultry which support the poultry farmers are neglected.

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#### **OBJECTIVES OF THE WORKSHOP**

The overarching goal of the proposed workshop on 'ENTREPRENEURSHIP DEVELOPMENT THROUGH DUCK FARMING' is to bring various stakeholders on one stage and brainstorm the various possibilities for promotion of entrepreneurship in this sector through cooperatives. At the same time, the workshop will identify the bottlenecks at various levels and will aim at evolving options. The key beneficiaries of this workshop are the poultry farmers, budding entrepreneurs, youth, women and vulnerable communities. The workshop aims to augment the awareness about Duck Farming from a business point of view and also come up with an actionable, time bound plan which will contribute towards attaining the vision of Doubling the Farmers' Income by 2022. Specifically, the workshop would aim to develop a model of commercial Duck Farming through a network of cooperatives.

The proposed outline of the 120 minutes long workshop on remote video mode can be as follows:

A. Technical Sessions

- i. Duck Farming : Scenario Analysis
- ii. Production Systems, Breeding, Feeding, Nutrition and Care
- iii. Value additions
- iv. Supply Chains
- v. Role of Collectives (Cooperatives, SHGs and others)
- B. Experience sharing
- C. Way Forward

#### EXPECTED PARTICIPATION

Poultry farmers, entrepreneurs, youth, women, vulnerable communities, scientists, technocrats, policy makers, chefs, hotel and restaurants associations, processors, sellers, subject matter experts, academicians, supply chain players, development finance institutions, quality control institutions and the media.

### National Workshop on ENTREPRENEURSHIP DEVELOPMENT THROUGH DUCK FARMING

## 22 July, 2020 Wednesday. 11: 00 AM to 1:00 PM

Organized by

National Cooperative Development Corporation (NCDC)

In partnership with Ministry of Rural Development, Govt of India Indian Council for Agricultural Research, DARE, Govt of India Government of Bihar, Government of Goa, Government of Kerala and Government of Manipur

#### PROGRAM

Prior registration at https://webinar.ncdc.in It will be on ZOOM

Time	Program
11:00- 11:01 AM	Anchor: Sh Mukesh Kumar, ED, NCDC
	Moderator : Dr. V.K. Saxena, ADG, ICAR
11-01- 11:04 AM	Welcome address by
	Sh. Sundeep Kumar Nayak, MD, NCDC
11:04-11:13 AM	Address by
	Sh. C. R. Garg, Secretary Coop, Govt of Goa
	Ms Bandana Preyashi, Secretary Coop, Govt of Bihar
	Ms Tinku Biswal, Secretary AH, Govt of Kerala
11:13– 11:20 AM	Special Address by
	Dr. B. N. Tripathi, DDG (AS), ICAR
11:20–11:28 AM	Inaugural Address by
	Ms Nemcha Kipgen, Hon'ble Minister Coop, AH Govt of Manipur
11.28 -11.43 AM	Keynote Address by
	Sh N. N. Sinha, Secretary (RD), Gol
11.43 –12.15 PM	Presentations by
	Ms Diksha Mandavi, SA, NCDC
	Dr Nibedita Nayak, Scientist, CCARI-ICAR, Goa
	Dr Sunil Giri, Pr Scientist, CARI-ICAR, Bhubaneswar
12.15 – 12.43 PM	Experience Sharing by
	Kerala: Team of Kerala
	Goa: Ms Jacqueline, Duck Farmer
	West Bengal: Team of West Bengal
	Chefs' Association: Representative
12:43 – 12:58 PM	Q & A session moderated by Dr. V.K. Saxena, ADG, ICAR
12: 58 PM	Closing - Vote of thanks by Dr S.K. Tehedur Rahman, DD, NCDC



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**Poultry Dairy and Livestock Division**