

Pre-Investment Concept Note

# Sustainable Agro Eco-Resort



# **Sustainable Agro Eco-Resort**

## **(Advanced Fishery, Duck Farming, Dairy and Cattle Fattening Project)**

### **ZG Agro Ventures Ltd.**

This is a concept of a combined Agro Eco-Resort venture which sheds light on advanced Agro-farming ecosystem comprising of fisheries, duck farming, dairy, beef as well as an eco-resort (optional in the second phase).

The project involves up to 20 to 30 acres of land as minimum in any part of the country with pleasant and reasonably quiet environment. The project implementation may be planned in two phases. In the first phase fisheries, duck farm and dairy production can be started; In the second phase small private cottage based eco-resort can be planned on top of the ponds.

### **Implementation Plan for Phase 1**

As described above IPRS Fish Farm and Peking Duck Farm, Dairy Farm along with a Feed Mill will be developed. The project will have clean energy source as well as an advanced waste management system. Following are some brief descriptions of each component:

#### **In-Pond Raceway System Fish Farm**

An Eco friendly, sustainable model and productive Aquaculture method called “In pond Raceway System” has been developed by USSEC (U.S. Soybean Export Council; formerly known as The American Soybean Association – International Marketing; (ASA-IM) jointly with the technical and scientific collaboration of Auburn University.

Because of better water quality management, system management the disease outbreak is very less when compared with the traditional culture systems. IPRS technology essentially combines the advantage of four aquaculture systems; the re-circulating systems, raceway models, cage farming and the pond aquaculture system.

IPRS system can combine controlled fisheries along with open naturally grown fish in the same system at the same time which is a unique advantage over any other aquaculture system.

The system is so efficient that the farmer can generate 80 to 110 MT Fish productions from 1HA pond in a year with negligible effluent discharge. The farmer can also be able

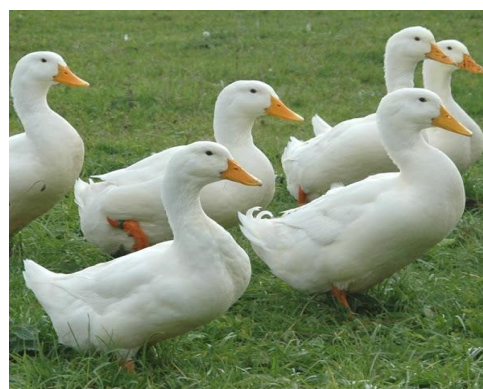


to manage multiple culture species and sizes at a time in the same system. With this flexibility and enhanced productivity, the economic advantages are far better than the traditional farming systems.



### **Peking Duck Farm for Meat**

Commercial Pekin duck farming is the most common and popular business throughout the world. The Pekin is a very old breed of domestic duck, and it was originated from China. And today the breed is one of the most popular commercial duck breeds.





### Campbell Duck Farm for Egg

Commercial Campbell duck farming for egg production is the most common and popular business. Raising Khaki Campbell ducks is easy and a very profitable business which brought revolution in duck farming business. Khaki Campbell ducks lay about 280 to 300 eggs per year for 2 to 3 years continuously.



## Dairy Farm

The dairy farm envisaged is a combination of advanced electro-mechanized state-of-the-art Dairy Farming facility along with environment friendly waste management and bio-electricity generation system, advanced pasteurization plant. The Project will begin with 200 imported milking cows.



## Feed Mill

Total feed requirement for both fish and duck per day will be around 50 MT. Therefore, meet the regular demand a medium scale 5 MT per hour capacity feed mill will be installed to meet captive demand.



## Key Facts of the Project:

Basic Info	
<b>Type of Product</b>	<ol style="list-style-type: none"> <li>1. Fishes (up to 16 varieties) <ul style="list-style-type: none"> <li>• Live Fish</li> </ul> </li> <li>2. Duck (Peking Duck) <ul style="list-style-type: none"> <li>• Live Duck</li> </ul> </li> <li>3. Duck (Khaki Campbell Duck) <ul style="list-style-type: none"> <li>• Duck Egg</li> </ul> </li> <li>4. Dairy <ul style="list-style-type: none"> <li>• Pasteurized Milk</li> </ul> </li> <li>5. Cattle Fattening <ul style="list-style-type: none"> <li>• Beef</li> </ul> </li> </ol>
<b>Other Products</b>	<ul style="list-style-type: none"> <li>• Free living fishes in open pond</li> <li>• Aquaponic vegetable</li> </ul>
<b>Design Capacity</b>	<ul style="list-style-type: none"> <li>• Fish: 580+ MT/Yr</li> <li>• Duck (Meat): 240 MT/Yr</li> <li>• Duck (Egg): 4.9 Mill pcs /Yr</li> <li>• Milk: 850 MT /Yr</li> <li>• Beef (Live weight): 120 MT /Yr</li> </ul>
<b>Energy Source</b>	<ul style="list-style-type: none"> <li>• Solar</li> <li>• Local Grid</li> <li>• Biogas Generator</li> <li>• Diesel Generator</li> </ul>
<b>Land</b>	(20+10) = 30 Acres
<b>Annual Cycle</b>	330 days
<b>Operation Period</b>	<ul style="list-style-type: none"> <li>• Farming: 24 hrs /day</li> <li>• Feed Mill: 10 hrs / day</li> </ul>

<b>Market</b>	<p>Fish:</p> <ul style="list-style-type: none"> <li>Local Market: 100%</li> </ul> <p>Duck Meat:</p> <ul style="list-style-type: none"> <li>Local Market: 100%</li> </ul> <p>Duck Egg:</p> <ul style="list-style-type: none"> <li>Local Market: 100%</li> </ul> <p>Pasteurized Milk:</p> <ul style="list-style-type: none"> <li>Local Market: 100%</li> </ul> <p>Dairy:</p> <ul style="list-style-type: none"> <li>Local Market: 100%</li> </ul> <p>Beef:</p> <ul style="list-style-type: none"> <li>Local Market: 100%</li> </ul>
<b>Project Estimate</b>	<p><b>BDT 120 cr</b> (Excluding Land, Land Development, Working Capital etc)</p>

## Products

Live Fish		
 <p><b>Coral / Baramundi</b></p>	 <p><b>Tilapia</b></p>	 <p><b>Ruhi</b></p>
 <p><b>Katla</b></p>	 <p><b>Pangash</b></p>	 <p><b>Boal</b></p>
 <p><b>Pabda</b></p>	 <p><b>Shrimp</b></p>	 <p><b>Shrimp</b></p>
Live Duck & Processed Duck Meat		
 <p><b>Live Duck</b></p>	 <p><b>Duck Egg</b></p>	 <p><b>Pasteurized Milk</b></p>
 <p><b>Beef</b></p>		



## Eco-Resort

In the second phase of development small groups of cottages can be introduced in the middle of each pond. A calm and serene surrounding might be the perfect get-away from the hustle and bustle of the city crowd. Activities like kayaking, fishing etc. might add the sweet sprinkle on top.



## Key Takeaway of the Project

- A sophisticated blend of natural and Hi-Tech farming
- More natural products with close to natural taste
- Wide range of products with up to 20+ varieties of fishes adjustable with market demand.
- Fresh, hygienic pasteurized milk source meeting market demand
- Possible expansion of other milk-based value-added products
- Available feed material source
- Option for other agricultural and aquatic products
- Implementation of Phase 2 (Eco-Resort) will ensure multiple usage of land area earning additional profit
- Inclusion of waste management and solar energy will ensure sustainable eco-development reducing carbon footprint.

## End of Document