



INDIAN POTATOES LIMITED

POTATO VALUE CHAIN

If we see the whole world, we will find only two strong matrix for evaluating the growth to become the world leader in Food & Agriculture i.e. Bio-diversity and technology. The technology can be acquired but bio-diversity can not be acquired and we have the inherent strength in terms of rich-biodiversity and more arable land. Interestingly, we do not have many threats from any of our competitors, if we realize our strength and exploit it fully.

The China, our neighbor and the major threat for our aim to become WORLD LEADER IN FOOD AND AGRICULTURE is nowhere near us. The China has very little arable land in spite of having large geographical area. A large part of China's land is desert and another large part is covered by highlands of Tibet and about 13% of the total land area is woods and only 11% of the whole 9.6 Million Sq.Km can be used for agriculture. China has only half of the arable land in comparison to India(200 million hectare), which is only one third of the size of the China (106 million hectare).With more meat consuming country, China require more grains for meat production. About 22% of their grains are being consumed for meat production and in addition to that fast growing fish farming need about 15 million tons of grains per year.

POTATOES: The whole world is talking about Food Safety .In India, also there is threat to Food Security .So, if India recognizes the importance of Potatoes as staple food equal to rice and bread, the food shortage will never be there in India rather it will help poor people fighting malnutrition also in addition to hunger due to it's high nutritional values.

If we compare the situation of Potatoes between India and China, we will find that we are at a much stronger situation. China produces about 57 million tons of potatoes by using 4.5 million hectare land which is about 4.25 of their arable land while India is producing about 34 million tons of potatoes by using 1.8 million hectare land which is even less than 1% of our arable land. China uses about 40% potatoes for other uses other than food while India uses 100% of it's produce as food only. Though, per person availability of Potatoes is 40 kg but it actually it comes 24 Kg while in India it is about 29 Kg per person.

So, if we promote consumption of potatoes in India and remove misconception and prejudices about potatoes, it can serve as staple food for the poor people and help them to fight hunger and malnutrition. Potatoes have all the nutritional values, required for fight malnutrition. Of course, the

over consumption may cause dietary diseases but balance consumption will fight both hunger and malnutrition.

Regarding high prices during last one decade are due to limited growing area, the low production, the primitive cultivation method and lack of post harvest infrastructure and increased awareness about potatoes and it's promotion as commercial crop and it's uses by adding value to it, can easily be overcome by filling gaps.

If we see potatoes with a commercial point of view. Our neighboring countries like Nepal, Sri Lanka, Singapore, Malaysia , Gulf countries are the ready market for surplus and if we have planned and targeted production for European countries and Russian countries where potato is a staple food will add to our strength and open up new business opportunity for exports from India, which can be larger than any of the perishables and it will never create scarcity for our countrymen.

So, let's realize our inherent strength and march ahead with our mission to become the World Leader in Food & Agriculture by 2030.

Background :

Govt.of India had approved an AGRI EXPORT ZONE in UP for Potatoes covering all the potential Districts like Agra, Hathras, Farrukhabad, Kanoj, Meerut, Baghpat , Aligarh, Badaun, Rampur, Ghaziabad, and Firozabad.This announcement was done in 2003 which resulted significant growth in Exports and Price Control mechanism which is a regular problem either due to excess production or due to crop damage due to various reasons.

Problem :

During last almost twenty years, Indian Potatoes scaled many heights as well as experienced many roller-coaster kind of rides and experienced many turmoils and in turn it gave many sleepless night to policy makers. Many processing units and infrastructural facilities have been set up in West Bengal, Gujarat, Madhya Pradesh and Gujarat but no significant developments took place in UP, which is the largest Potato producing State. We have about 45 million Mt potatoes but we do not have even 10% of the certified seeds and even than we are the world's number three Potato producing country.

Potential :

We have a huge gap in seed, we have a huge gap in post-harvest infrastructure and we have a very very big gap in value addition sector. These gaps represents the opportunities in this sector.

Concept :

To address the whole value Chain and supply chain of Potatoes in UP covering all the important production area with a “FARM TO ENERGY APPROACH” ensuring the win-win situation among all the value chain partners and sustainability of the model.

Components :

We will have all the components from Seed to Market and farm waste/process waste to energy and hence the following components will be taken into consideration to have a one stop solution to address the entire value chain and supply chain.

- 01-Certified seeds : This will require tissue culture , aeroponics and basic seed multiplication facilities and the storage facilities to store 2 million MT certified seeds.
- 02-Varietal improvement through introduction of new process grade varieties :This requires the research & development facility to support the need of process grade varieties to ensure the availability of process grade potatoes.
- 03-Contract multiplication of various stages of Potato Seeds :The contract farming will be promoted through Farmers Producer Companies in all the AEZ Districts covering all the western UP Districts, suitable for seed multiplication.
- 04-Processing Units : In the central processing area as well as in satellite processing are to process for various products including potato chips, French fries, frozen snacks, potato granules/flakes, vodka, starch and other products .
- 05-Cold Chain : It is integral part of the Potato project to handle seeds, ware potatoes and finally the frozen processed products. The cold chain will connect the farm to market as well as the ports .
- 06-“THE POTATOES” : Potato Shops ,the retail potato shops will be set up in UP,NCR region as well as in the non-potato producing States to maintain the price consistency as well as to ensure the availability of good quality produce and products at a competitive prices.
- 07-Ancillary units : The ancillary units will be set up to produce packaging material and other required items for different products.
- 08-Incubator Centre : will ensure all possible support to the participating units with it's central product development, analytical facilities, logistics support and other support system including disease forecast system and plant protection lab.
- 09 -Skill Development Centre : The state of art modern training centres at central facility centre as well as at all the 11 satellite centre will be set up to train the farmers for their pre-harvest and post-harvest requirement.

Steps to be taken for execution:

- 01-Sensitization meeting for all stake holders followed by the beneficiary members registration.
- 02-Registration of Potato Farmer Producer Organizations.
- 03-Preparation of (Techno-econo feasibility report)
- 04-Submission of the project for Bank Appraisal.
- 05-Stake Holders Meeting for their response on execution of the project
- 06-Execution

Components of the Project :

- 01-Seed Production of 2 Million MT with storage & distribution network in Potato Producing areas.
- 02-Supply Chain Management in NCR Region / Mumbai-Nasik Corridor and in non-potato producing States.
- 03-Food Processing Complexes in UP
- 04-Vodka Processing Unit at Firozabad
- 05-Potato Shops for B to C Marketing Network
- 06-Pack houses in all Potato production areas.

Execution Schedule :

With a Zero Date "03rd July,2023,the entire project will be implemented before 31st December,2024 to catch the season starting from February 2025.

Total Project Cost :

Rupees 1800 Cr INR (200 Million Euros) to be funded through equity and International Loan



PROSPERITY THROUGH AGRIBUSINESS

INDIAN POTATO VALUE CHAIN



POTATO PRODUCTS

- Fresh Potatoes .
- Peed & Cut Potatoes .
- Fresh & Frozen
- French Fries.
- Fresh & Fried Chips.
- Frozen snacks like
- Tikki. Wedges.
- Smilees.
- Powder. Flakes.
- Granules
- Cattle Feed.
- Starch.
- Vodka.
- Ready Meals &
- Snacks

EXPORTS

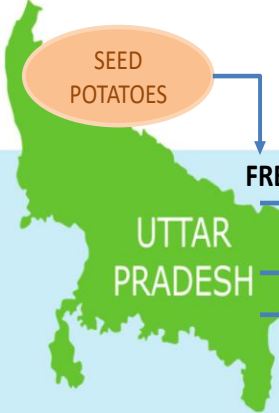
- Fresh & Frozen Potatoes
- Potato Seeds
- Potato Powder / Potato Flakes / Granules
- Frozen Snacks
- Vodka
- Starch

VALUE CHAIN PARTNERS

- FARMERS
- AGRI-INPUT
- MANUFACTURERS
- COLD STORE OWNERS
- TRADERS
- PROCESSORS
- SUPPLY CHAIN
- MANAGEMENT
- RETAILERS
- CONSUMERS



SEED POTATOES



FRESH POTATOES

- AP
- Tamil Nadu
- NE Region
- Maharashtra

SOCIO-ECONOMIC BENEFITS

Employment . Self-Employment . Consistency of Value Chain & Supply Chain . Reducing the Post-harvest Losses . Technology Upgradation In Cold Stores .Taking India to No.1 Position from No 2 Position in the World. Contributing to Sustainable Development Goals Agenda