

Perspective:

Agri - industry: Concept and Practice

Introduction:

Plants represent one of the major divisions of the living world created by the nature. Agriculture was introduced by man, may be around 14 – 15 thousand year back. The word industry is derived from Industria means hard – work. Generally it is applied to manufacture of goods in factories. Agri industry represents a planned activity in the field where plant products like cereals, fruits, vegetables etc are produced. We can apply similar principles to this activity as we do for industry in general. However, there are major differences which must be taken into consideration.

Bio-philosophy and Agri-industry:

Biological world is the product of nature. Can we follow nature to understand the handling of biological entity- The plants? Let us have a look at our own body. In a way, it is a chemical factory managed by billions of cells. There is a division of labor. Heart cells participating in the functioning of heart, kidney cells that of kidney etc. Nature has endowed them with following philosophical dictum –

A cell works for self, the organ and the whole organism.

At the organism level, the governing principle is integration. It means holistic approach to control. To be specific, the elements of the control mechanism are so interwoven that changes at one level are sensed at every level and requisite action follows.

We find these principles are echoed in Ayurveda to guide human being.

सत्त्वमात्मा शरीरं च भयमेतत्त्रिदण्डवत् ।

लोकस्तिष्ठती संयोगात्त्र सर्वं प्रतिष्ठितम् ॥

“The mind, soul and body from the three pillars, on which not only a human being’s existence rests, but also that of the world.”

Philosophy of yoga provides the way of life to undertake the responsibility.

Dhyana yoga – Think, plan

Karma yoga – execute, actions which are good for self, family and society under the time and circumstances (yukta)

Bhakti yoga – Devotion, concentration

Raj yoga – Asnas, pranayama and dhyana for physical and psychological balance.

Fundamental considerations in managing industry:

1. Raw material
 2. Technology
 3. Human resource development
 4. Product marketing
 5. Finance and economy
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1. Raw material :

The major difference between Agri – industry, and other industries is the raw material itself. Other industries thrive either on the product of nature (by nature or natural resources we mean earth, water, air, sunlight, space (Heb@eceneYetles), or further processing of the product derived from nature.

As against it, in agri - industry the raw material consist of the natural resources. This has a tremendous bearing on the output which becomes unpredictable.
 2. Technology:

Early practice of agriculture was in tune with nature. Nutrition, maintenance, disease management were based on factors derived from nature; biological if one wants to name it, with the advent of chemical and currently genome modification, it appears that natural balance is getting lost . Some of the plant species have disappeared and still disappearing, a Matter of grave and concern.

Drugs in homeopathic formulations along with principles Of Ayurveda and true emerging cell molecular biology; it is possible to evolve techniques of plants protection in tune with nature.
 3. Human Resource Development:

This is the most difficult element in today’s circumstances. If we understand the magnitude of the problem, our responsibility, our capacities, - individually and collectively and follow yoga way of life, it is most likely that future of mankind will be better.
 4. Product marketing:

Follow cell→ tissue→ organ→ organism strategy.
First self→ family→ the village→ the nation.....
 5. Finance and economics:

Here again follow the nature. In our body ATP (adenosine triphosphate) is supposed to be the currency of the boy. It is distributed according to the need. The rules are strict. After a specific period of time, when cell becomes ineffective in function, it is made to die, called apoptosis or self death. If a cell does not obey and starts dividing and proliferating, vigilance system is activated and dissolution of the cell occurs.

Lesson? - Distribution of wealth as per the need.

Agri industry: Practice

(Philosophy of nature, experiment in science and in art of living)

By

Mr. Milind. and Mrs. Suvarana Vaidya at Reel, Ganpatipule ,district Rathagiri.

Vaidyas, a highly educated couple decided to settle at Reel . Where Mr. Vaidya has ancestral house. In the beginning there were few acres of land with 50 old mango trees. The experiment started in 1994.

A. Raw material.

First priority was to maintain and make maximum use of raw material for family.

1. Water - In the beginning there was one well. When Mr.Vaidya brought more land water requirement increased. He puts weirs on rivulets in his land. Over the sloped land he puts banks. 4 new wells were dug. Drip irrigation is used.

Principle – store Water and use it with maximum care.

2 Land - Testing soil provides clues as to the nourishment required for agriculture.

Mr. Vaidya avoided use of chemical fertilizers to the extent possible so that fertility of the land is maintained.

B. Technology:

One has to member that in agriculture you are playing with nature. To choose appropriate technology along with useful old age practices require discrimination. One needs to preserve bio-ecological balance keeping in mind that you have to have maximum output that some of the techniques used by Mr. Vaidya are mentioned below.

1. Land ploughing with power tiller.
2. Different methods for sowing rice like S.R.T. similarly use of different techniques for grafting in mango cultivation. It increases productivity.
3. In the beginning he uses only essential fertilizers. Later on he started preparing compost from earthworm, cowdung, organic waste in the farm. It is more beneficial to soil nutrition and fertility.
4. Growing different fruits besides mango and cashew nuts.
5. Different vegetables, pulses and rice are grown. The land is used throughout the season. Besides providing fodder to animals soil fertility is maintained.
6. He prepares by products like ghee, mango pulp, juices etc.
7. He made special arrangements in the form of a stand with water vessels over it for birds. It helps pollination.
8. Disease treatment of plants is mostly through biologicals.

C. Manpower –

Agri- industry, if the concept is to be developed and made operationally effective, needs manpower and which is the biggest hurdle. Mr. Vaidya handles it tactfully. His employees are from nearby 2-3 villages if one group is absent, especially with local festivals, another group is on duty. This is possible because different villages have festivals at different time. By now his industry has grown to the extent that he is able

to maintain 8 families and provide them works with all the year round. He helps them in need. He guided them to invest in insurance. Medical aid of the right type is provided. In short, he instills in them self confidence to have a better life in village.

D. Marketing and sale

The approach of Mr. Vaidya is very simple. He started selling his products in nearby villages. Later on he started sending it to district place. Recently he sends mangoes directly to his customers in cities. He could save commission at the same time giving work to his employees.

Profit loss account of recently cultivated 3 agricultural produces

1. Rice –

Area – 1 guntha, local variety of healthy rice

Income in Rs.	Expenses in Rs.
2,550 from sale of 150 kg rice at 17 Rs/kg	1,200 purchasing seeds, compost, labour etc. etc
200 from hay (for cattle)	
Total income – 2,750	Total expenses – 1,200

Net profit – 1,550

Period – 130 to 140 days

2. Green Chilies – grown in traditional way

Income in Rs.	Expenses in Rs.
6,400 from sale of 80kg chilies at 80 Rs/kg	3,200 as above for rice
Total income – 6,400	Total expenses – 3,200

Net profit – 3,200

Period 90 to 100 days

3. Sweet corn

Income in Rs.	Expenses in Rs.
18,000 from sale of 4 tons of corn	12,000 as above
15,000 from green fodder for cattle	
Total income – 33,000	Total expenses – 12,000

Net profit – 21,000

Period – 90 to 100 days

(In all cases period starts from sowing till you get produce in hand)

Integrated Operating System

