Annexure-I

New ideas for job creation through growth in and manufacturing

1. Background

Availability of quality employment opportunities has emerged as one of the biggest challenges with the Govt. in recent times. The fact that 8 million youth entering the job market makes it more important that the right set of policies be framed to accelerate growth especially in manufacturing and agriculture which have a huge potential.

2. Agriculture

The agriculture sector employs nearly half of the workforce in the country. However, it contributes to 17.5% of the GDP (at current prices in 2015-16). Over the past few decades, the manufacturing and services sectors have increasingly contributed to the growth of the economy, while the agriculture sector's contribution has decreased from more than 50% of GDP in the 1950s to 15.4% in 2015-16 (at constant prices) One of the critical challenges with farmers today is lack of storage facilities and marketing capabilities. Famers are compelled to sell their produce at Mandis at throwaway prices as they do not have access to cold storage facilities. Wherever storage facilities are available, the cost is prohibitively high.

Another reason for the plight of agriculture is the lack of direct market access. Farmers typically travel to Mandis and must sell their produce to intermediaries at Mandis at the prices as commanded by these intermediaries. On several occasions, prices are so low that farmer are not able to recover their costs. Such conditions have been prevalent for quite some time and have resulted in distress to a significant number of farmers.

Some of the suggestions to alleviate the farm distress are provided below:

(a) Contract manufacturing:

Contract farming is defined as a system for the production and supply of agricultural/horticultural produce under forward contracts between producers/suppliers and buyers. The essence of such an arrangement is the commitment of the producer/ seller to provide an agricultural commodity of a certain type, at a time and a price, and in the quantity required by a known and committed buyer. Contract farming usually involves the following basic elements –

- Pre-agreed price
- Quality
- Quantity
- Acreage (minimum/maximum) and time

According to the contract, the farmer is required to plant the contractor's crop on his land and to harvest and deliver to the contractor a quantum of produce, based upon anticipated yield and contracted acreage. This could be at a pre-agreed price. Towards these ends, the contractor supplies the farmer with selected inputs, including the required technical advice.

There are successful case studies in this area. Contract farming in wheat is being practiced in Madhya Pradesh by Hindustan Lever Ltd (HLL), Rallis and ICICI. Pepsi foods ltd. in Punjab – Tomato Puri, Tomato paste, Basmati Rice, Chillies, Oilseeds, and vegetable crops like potato. The company has established a strategic partnership with PAU and Punjab Agro Industries Corporation (PAIC).

Apache's integrated cotton company model –Coimbatore, Tamil Nadu backed by a model called the Integrated Cotton Cultivation (ICC), which guarantees a market-supportive mechanism for selling the produce to growers. However, there are immense benefits associated with contract farming, it has not scaled up. The reasons cited are mentioned below:

- No credible enforcement mechanism for contract farming in India
- Since the size of the holdings is small the company will have to enter a contract with many farmers. This increases costs of the company
- There is a lack of comprehensive crop insurance scheme in India

The Govt. of India has recently enacted farm laws that provides for contract farming. The act provides a comprehensive legal framework to assure that the interests of farmers remain protected. While the enactment of law is a welcome step, it still needs to be accompanied with massive awareness program across the farmer community. This will need to be undertaken by state governments in assistance with Gram Panchayats. While there will be teething problems, a matured contract farming market will ensure necessary investments in cold storage, transportation and other ancillary services which are the need of the hour. Financing and Crop insurance as a market will also pick up significantly as corporates who will enter the market will provide necessary critical mass. Assured income from such contracts will ensure that farmers can recover their cost as well make a decent margin. Further, the arduous task of transportation and marketing of produce shall get transferred to contracts.

(b) Food processing:

Food processing contributes ~8% of India's GDP. However, given the large arable area, a significant number of livestock and population involved in agriculture, there is huge untapped domestic and export potential.

- **Domestic market**

India imports a significant number of food-related products, which include items like animal or vegetable fats, fruits, vegetables, beverages, coffee etc. In a country with a sizeable workforce are dependent on agriculture, their imports can certainly be minimised through a well-crafted policy and an organisation structure to support it. All that is required is to provide necessary infrastructure support to the farmer to produce the items mentioned above locally. Govt. must constitute an expert committee that can identify products that are imported presently and can look for areas within a country where such items can be produced and accordingly come up with an action plan so that such items can be produced locally.

- **Exploiting Export Potential**

India's exports of food processing are around US $ 30-35 billion. Major export destinations include Saudi Arabia, UAE, US, and Vietnam. While performance is decent, there is significant upside potential, which can exploit further. For example, let us take an example of Saudi Arabia. Saudi Arabia imports of food products and vegetables are close to USD 9 Billion (2016). The break-up is provided below:

S.No.	Items	Value (US $ Billion)
1	Vegetable, Fruit, Nut and Food Preparations	3.08
2	Cereals	2.97
3	Flour, Starch and Milk products	1.49
4	Miscellaneous edible preparations	1.47
	Total	9 .00

Source: World Bank Trade Data

While India's food exports are robust, it is only 10-12% of market share. India can have a larger share if it works proactively to identify weaknesses and address them through right policy initiatives. Analysis of other countries will reveal similar picture; hence it is critical that more focus is made on increasing agriculture exports from India. Contract farming and food processing can be game changer for the Indian economy and its prosperity if concerted efforts are made in the right direction.

(c) Powering cold storage and food processing industries through solar

Power is one of the basic inputs for cold storage as well as food processing industries. One of the biggest impediments in usage and growth of cold storage facilities is high cost of electricity. The cold storage and food processing are classified under **'LT / HT Industrial category'** which has a significantly high tariff. The tariff for relevant Industrial category in some of the states is provided below:

S.No.	State	Fixed Charge (Rs. / kVA/Month)	Energy Charge (Rs. / kWh)
1	Madhya Pradesh	285	6.30
2	Uttar Pradesh	245	7.35
3	Tamilnadu	350	6.35
4	Maharashtra	160	7.68

As can be observed, tariffs are quite high and counterproductive to large-scale deployment of cold storage and food processing industries. To add to the woes, power supply is quite erratic in rural areas which means that perishable produce cannot be stored reliably.

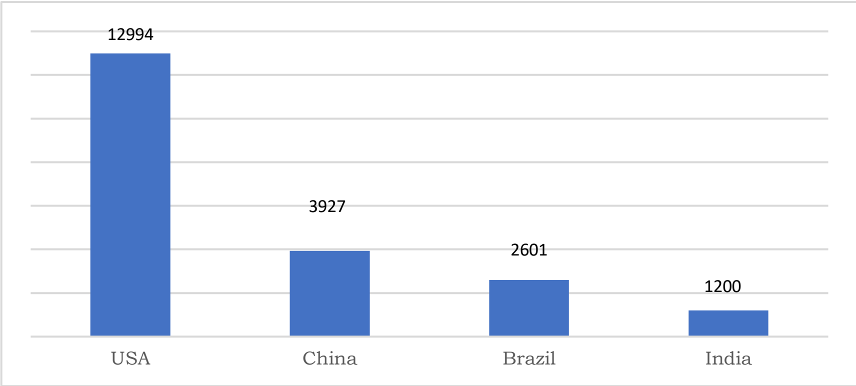
One of the potential solutions is usage of solar power which can generated locally near the facilities. The cost of solar has declined significantly in last few years and is comparatively lower than tariff that is charged presently. It can be clubbed with battery of suitable size to ensure continuous supply of power to the industries.

3. Focus on Manufacturing

Per capital consumption of electricity continues to be significantly lower as compared to countries across the globe. India's per consumption presently 1/6th of that of USA and 1/3rd of China which reflect the hidden potential for energy demand.

One of the primary reasons for low per capita consumption is lack of growth in manufacturing sector. The share of manufacturing in India's GDP has been stagnant at 16-17% for last 7-8 years.

Per Capita Consumption of Electricity (kWh)



Source: World Bank

Some of the key areas of opportunity across some of the sectors is provided below:

Electronics	▪ Domestic manufacturing of telecom networking equipment, including routers and switches. ▪ Next generation Software-defined Networking equipment ▪ Manufacture of low-cost mobile phones, handsets and devices
Pharmaceuticals	▪ Manufacturing of generic drugs ▪ Contract research
Automotive	▪ Automotive electronics ▪ Manufacture of automotive components, Tier 1 and Tier 2 suppliers to OEMs
Chemicals	▪ Bio-based raw materials to reduce dependence on oil ▪ Support supplies and services for Integrated petroleum, chemicals, and petrochemicals investment regions
Textile	▪ Raw fabric and dye production
Defence	▪ Indian Offset Partners ▪ New age information systems, communication platforms, simulators, and equipment

Effect on power demand and employment generation

The increase in share of manufacturing in GDP will result in increase in power demand. A very low rate of power demand is posing a major challenge in growth of renewable energy in India. Hence, manufacturing must be given impetus by encouraging SMEs.

With more and more SMEs coming online, power demand will shoot up sharply providing increased opportunities to renewable energy developers. The growth in SMEs will also lead to increased employment opportunities. As per estimates, SMEs have potential to generate 1 Cr additional jobs in next 5 years.