

## Protecting Seed Sovereignty - PepsiCo Case

### What is the issue?

- PepsiCo India Holdings (PIH) had sued 11 farmers for “illegally growing and selling” a potato variety registered in its' name, and later withdrew the case. Click [here](#) to know more
- This is a wake-up call to the policymakers on securing sustainable rural societies, protecting soil health and promoting seed sovereignty.

### What is the central problem?

- So many small farmers are, like the ones targeted by PepsiCo, reliant, directly or indirectly, on proprietary seeds.
- Typically these seeds are grown in high input (fertilizer-pesticide-irrigation) environments that, over time, erode local biodiversity.
- There is large expense in buying these seeds and inputs.
- On the other hand, there is loss of the skills and social relationships which rely on saving and exchange of seeds of indigenous varieties.
- In effect, small-scale farming continues to decline and face the persistent problems of lower income, status and dignity.

### What do the law provide for?

- In India, the Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001 deals with intellectual property rights in seeds.
- The law permits farmers to save and resow (multiply) seeds.
- Importantly, it also allows them to sell seeds to other farmers, irrespective of the seeds' original source.
- This broad permission (called farmers' privilege) is considered indispensable for 'seed sovereignty'.
- It also includes proprietary vegetative propagation materials such as what are used for the cultivation of potatoes.
- Clearly, there is a shift away from seed replacement to the right to save seeds.

### Why are proprietary seeds still dominating?

- The farmers cannot be blamed for thinking that proprietary seeds are better.
- Since the days of the Green Revolution, agricultural extension officers have

taught farmers to buy these higher-yielding seeds.

- So despite the legal protection offered to farmers' seeds, the emphasis remains on proprietary seeds.

### **What are the risks involved?**

- Proprietary seeds have narrow, uniform and non-variable genetic builds.
- Farmers could be using genetically distinctive seeds adapted to local conditions and farming traditions.
- But instead, they are adapting local conditions and traditions in order to use genetically standardised seeds, to ruinous effect.
- Alongside, there exists a science-and-industry-know-best stance when it comes to seed quality.
- Resultantly, efforts have been ongoing to pass a new seed law in India permitting the sale of certified seeds only.

### **What do regulatory efforts in Europe teach?**

- The EU Regulation on Organic Production and Labelling of Organic Products was adopted in 2018.
- For the first time, it permits and encourages, among other things, the use and marketing of organic agriculture.
- This refers to “plant reproductive material of organic heterogenous material.”
- It allows this without most of the arduous registration and certification requirements under various EU laws.
- Heterogenous materials, unlike current proprietary seeds, need not be uniform or stable.
- The regulation acknowledges the benefits of using such diverse material, including-
  - i. reducing the spread of diseases
  - ii. improving resilience
  - iii. increasing biodiversity
- Accordingly, the regulation makes way for expansive use of indigenous varieties.
- It would support the creation of markets and marketplaces facilitating trade of heterogenous seeds, including by small farmers.
- There are also multimillion-Euro research and innovation projects being invited and funded by the EU, to make this diversity an integral part of farming in Europe.

### **What is the need now in India?**

- A biodiversity-rich nation like India must shift its agriculture from a high-yield ideal to a high-value one.
- Here, 'values' include striving to minimise environmental harm while maximising nutritional gains and farmer welfare.
- **Heterogenous seeds** - Agriculture that conserves and improves traditional/desi (heterogenous) seeds in situ should be promoted.
- Small farmers must be educated and encouraged with proper incentive structures in this line.
- Currently, in the garb of protecting this diversity against biopiracy, India is preventing its effective use.
- **Record** - A permanent record-keeping system, perhaps blockchain, is needed.
- It helps farmers keep track of where and how the seeds/propagation materials and the genetic resources are being transferred and traded.
- **Payments** - Smart-contract facilitated micropayments could ensure that monetary returns come in from users and buyers of these seeds, from around the globe.
- The monetary returns would effectively incentivise continuous cultivation and improvement of indigenous seeds.
- It will also ensure sustainable growth of agriculture and of rural communities.
- **Traditional knowledge** - India's invaluable traditional ecological knowledge systems need to be revived.
- It should be made a part of mainstream agricultural research, education and extension services.
- E.g. the know-how contained in ancient Indian treatises like the Vrikshayurveda and the Krishi Parashar
- These fall within the scope of what international conventions such as the Convention on Biological Diversity refer to as 'indigenous and traditional technologies'.
- The revival of these technologies is central to promoting sustainable 'high value' agriculture.

**Source: The Hindu**