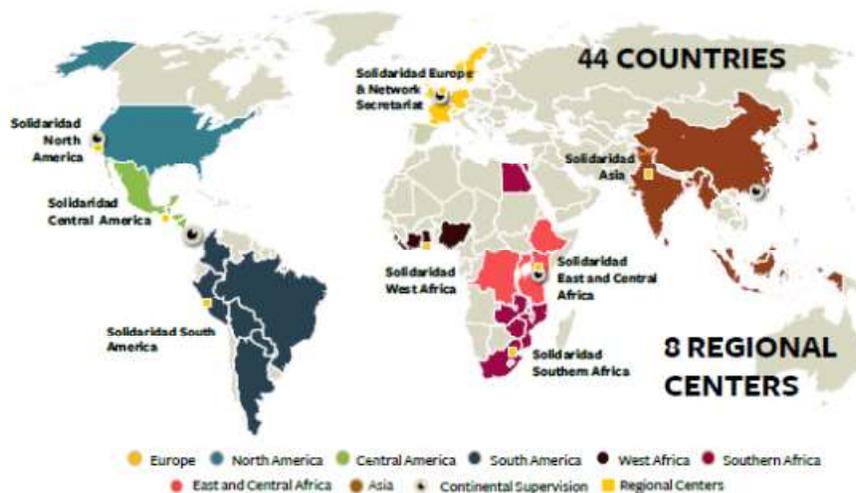


Solidaridad

Solidaridad Edible Oil Programmes Towards Supporting The PM's Mission On "Sustainable Edible Oil"

**By
Dr Suresh Motwani
General Manager
Solidaridad**

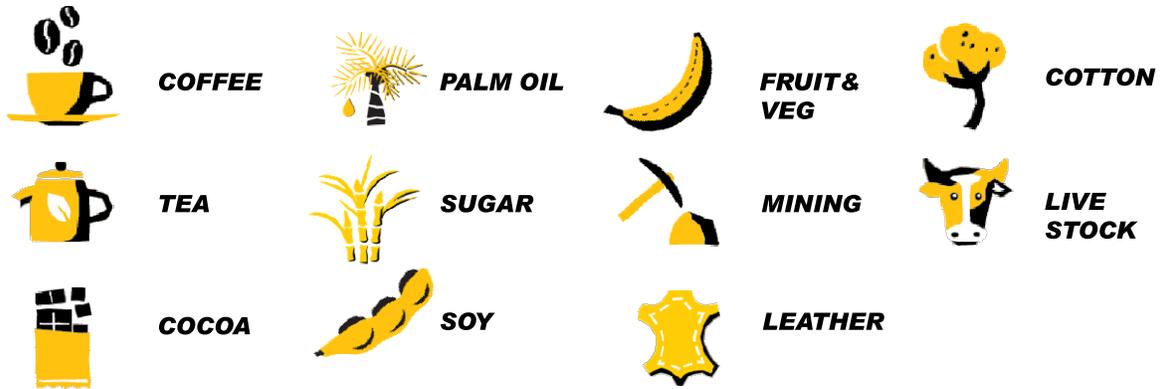
SOLIDARIDAD IS AN INTERNATIONAL CSO WORKING IN 44 COUNTRIES WORLDWIDE



Our vision is an economy that works for all: a world in which all we produce, and all we consume, can sustain us while respecting the planet, each other, and the next generations.

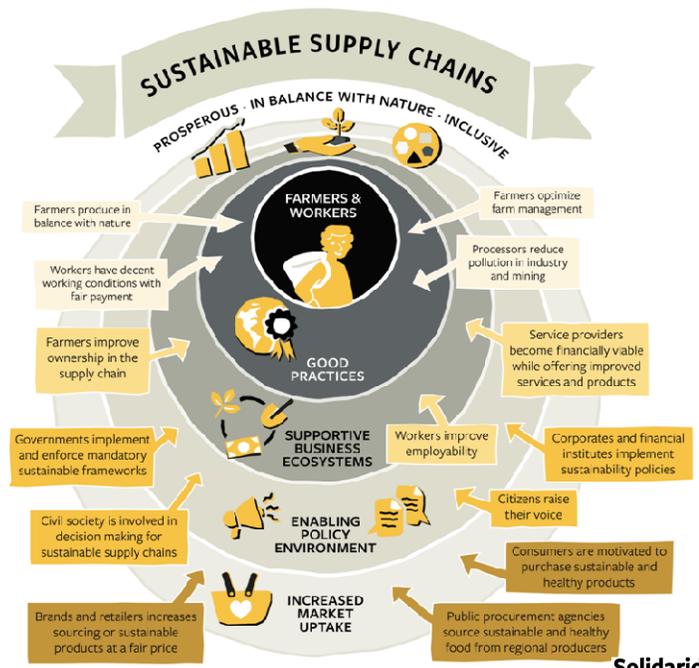
Our mission is to enable farmers and workers to earn a living income, shape their own future, and produce in balance with nature by working throughout the whole supply chain to make sustainability the norm.

BOOTS AND BRAINS ON THE GROUND IN 11 GLOBAL AND MANY LOCAL COMMODITIES



IMPLEMENTATION STRATEGY

SUSTAINABLE SUPPLY CHAINS THROUGH FOUR INTERCONNECTED LEVELS



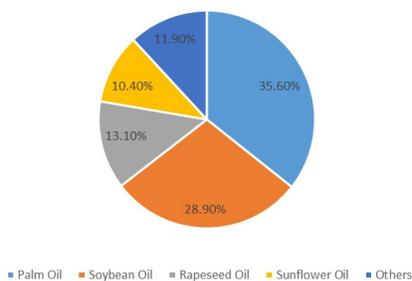
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OVERVIEW OF MAJOR VEGETABLE OIL CROPS

Vegetable Oil has one of the highest trade shares (~40%) of production of all agricultural commodities

Oil crop	Type of crop	Main oil production countries
Oil palm (<i>Elaeis guineensis</i>)	Perennial (25-year cycle)	Indonesia, Malaysia, Thailand
Soybean (<i>Glycine max</i>)	Annual (~6-month cycle). Rotated with other crops	USA, Brazil, Argentina, China
Rapeseed (<i>Brassica napus</i> and <i>Brassica campestris</i>)	Annual (~6-month cycle). Rotated with other crops	China, Germany, Canada
Cotton (<i>Gossypium hirsutum</i>)	Annual (~6-month cycle). Rotated with other crops	China, India
Groundnuts (<i>Arachis hypogaea</i>)	Annual (4–5-month crop cycle). Rotated with other crops	China, India
Sunflower (<i>Helianthus annuus</i>)	Annual (3–4-month crop cycle). Rotated with other crops	Ukraine, Russia
Coconut (<i>Cocos nucifera</i>)	Perennial (30–50-year cycle)	Philippines, Indonesia, India
Olive <i>Olea europaea</i>	Perennial, long-lived. Sometimes inter-cropped	Spain, Italy, Greece

Share of Major Vegetable Oils in Total Production, 2021



Source:
www.nature.com

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Vegetable Oil Demand and Supply Scenario in India

Demand

- ❑ The annual average demand for edible oil in India is of about 25 million tonnes
- ❑ Around 9-10 million tonnes of edible oil are supplied from domestic production. The remaining 13 - 15 million tonnes are supplied by imports
- ❑ India buys palm oil from Indonesia and Malaysia. The share of palm oil is more than 60 per cent of the country's total vegetable oil imports. The soy oil and sunflower oil are mainly imported from Argentina, Brazil, Ukraine and Russia.
- ❑ Import growth in respect of edible oils during the last decades is about 174%.
- ❑ India's bill for import of vegetable oil jumped 63% in 2020/21 (Oct - Nov) from a year ago to a record 1.17 trillion rupees (\$15.71 billion) as overseas prices of edible oils surged.
- ❑ During 2020-21, India imported around 133.50 lakh tonnes of edible oils, the share of palm oil is about 56%, followed by soybean oil at 27%, and sunflower at 16%.

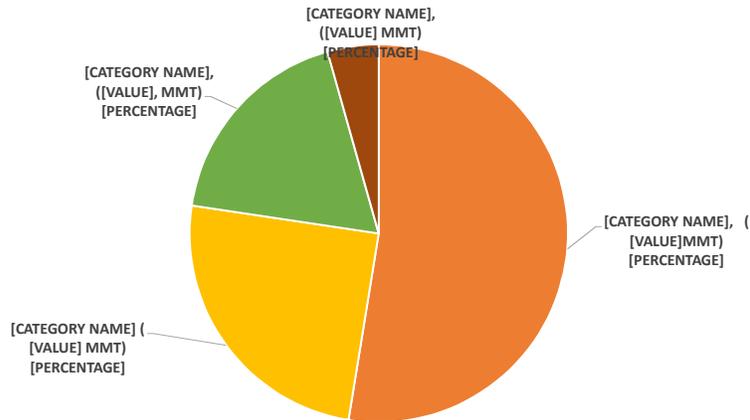
Supply

- ❑ India is the fourth largest producer of oilseeds accounting for about 20% of the global area.
 - ❑ Oilseed cultivation is undertaken across the country in about 27 Million ha, and producing around 33.42 million tonnes of oilseeds during 2019-20.
 - ❑ Rapeseed & Mustard, Soybean, Groundnut, Sunflower, Sesame, Niger seed, Safflower, castor and linseed are the nine major source of vegetable oil in India including these oil palm is also the key potential source
 - ❑ **The oilseed crops have registered significant growth in area and production in last 3 decades. However, compared to cereals like paddy and wheat, the growth rate of area and production of oilseeds is insignificant with wide variability in their yield**
 - ❑ **0.25 million tons of domestic palm oil production (only 2.5% of overall consumption)**
 - ❑ **The average per hectare yield of major oilseeds is over 50 per cent lower than average world yields in several crops**
- Major challenges associated with the low oilseed production are:
1. Rain-fed conditions in around 70% area
 2. Increasing input cost and lack of availability of quality seeds
 3. Lack of access to knowledge and capacity with limited resources.
 4. Low seed replacement rate and low productivity.



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India's Vegetable Oil Imports



Source: The Solvent Extractors Association of India
 Palm Oil includes RBD Palmolein, CPO, CPKO for period Nov 2019 to Oct 2020
 MMT = Million Metric Tonnes

- **During Oil Year 2019-20 (Nov - Oct) Palm Oil Import Sharply decreased to 7.2 MnT vis-à-vis 9.4 MnT during the previous year due to**
 - **5% safeguard duty and**
 - **placing RBD Palmolein in restricted list**

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WE NEED SUSTAINABLE VEGETABLE OIL SUPPLY CHAINS ON THREE LEVELS



PROSPERITY
 Socio-economic progress: income, decent work, fair pay, inclusive business ownership models

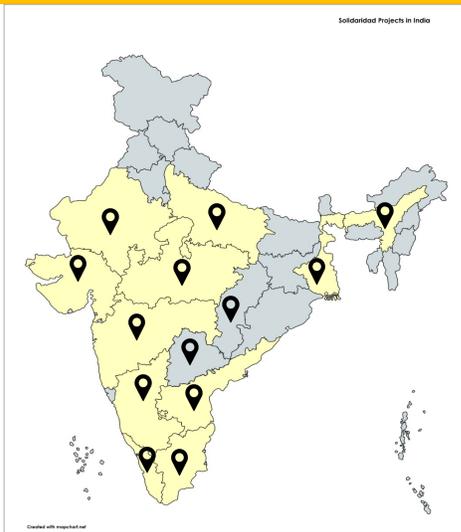


BALANCE WITH NATURE
 Healthy ecosystems: resilient against climate change, healthy, regenerative, circular, pollution- and waste free.

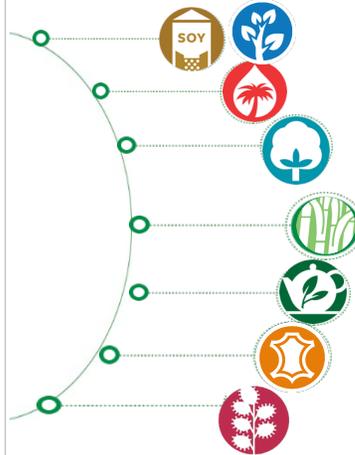


INCLUSIVITY
 Social-political influence: civic space, voices from the south, gender equity, youth, indigenous minorities.

SOLIDARIDAD PROJECTS IN INDIA



Public-Private Partnership Projects in 13 States



Solidaridad is Pioneer in leveraging partnerships for sustainable supply chain and enhancing the livelihood of smallholder farmers

Solidaridad Edible Oil Programmes

Sustainable Soy Programme



SEA Solidaridad Mustard Mission



Sustainable Oil Palm Programme



NATIONAL PLATFORM FOR SUSTAINABLE SOY



NATIONAL STANDARDS FOR SUSTAINABLE SOY

SOPA – SOLIDARIDAD LAUNCHED INDIAN SUSTAINABLE SOY STANDARD



TIMES OF INDIA

THE TIMES OF INDIA, INDORE | MONDAY, 14 DECEMBER 2021

New framework to enhance productivity of soybean

Government Nod Will Be Sought For Implementation

Two New Metrics Indore: Soybean Processors Association of India (SOPA) in collaboration with Indian Institute of Soybean Research and an international civil society organisation have announced a new framework for sustainable soy. The framework is working on developing a framework aimed at enhancing soy productivity, global trade and competitiveness in the international market. A team of experts are looking at enhancing and pain-point at regional level from cultivation to trade to connect with Indian standards for sustainable soy that is aimed at enabling farmers to increase their income and make India self-sufficient in soybean. India is the largest producer of soybean and standards in India are an opportunity to contribute to

DIVIDENDS OF THE INITIATIVE
 Will bridge yield gap through sustainable crop production practices
 Increase average productivity in India that lowers cost of soybean to around 2 crore per hectare
 Will make soybean a high yielding crop
 Will help in increasing the income of farmers
 Will help in increasing the income of farmers

operating from financial capital of soybean. The committee of experts is collecting region-wise data on soybean cultivation and the ready framework will be presented to government for implementation at regional level by farmer groups, social organisations and processors. Sushant Meher, general manager, soy and palm oil at the international civil society organisation working on sustainable soybean standards for implementation at regional level, said the framework will potentially address key sustainability concerns of Indian soy sector while fulfilling commitment of Indian soy industry to 'soybean sustainability'. Meher said this framework will potentially help in bridging sustainable production, social well-being, economic growth, sustainable business performance and ecosystem conservation. Experts said sustainable movement will boost soybean trade by improving exports and quality of products.

Agricultural Extension “Lab to lands” with Government Research Institutions



Farmer Field Schools

Field level trainings are facilitated by cadre of Solidaridad Trained Farmer Field School Facilitators & KVK experts



Front-Line Demonstrations

Front-Line Demo for “Lab to Lands ” Solidaridad’s Technical Advisor and Trained Rural Associates with the technical support of research institutes provide on-farm advisory support to farmers



Govt. institutions - Technical Knowledge

Government research institutions i.e. ICAR- Indian Institute of Soybean Research, ICAR- Indian Institute of Oil Palm Research , ICAR- ICAR- Directorate of Rapeseed Mustard Research, Central Institute of Agricultural Engineering, IARI and KVKs



Training of Trainers (ToTs)

Training of Trainers (ToTs) are organized with the technical knowledge support of KVKs/research institutes



Smart Agri: IoT Solutions and Sensors for Precise Advisory Support

Leveraging Technology for Self Subsistence to Enterprise Farming

- 

Promoting IoT BASE (sensors) solutions and Artificial Intelligence
- 

Farmers owned Producer Companies and Rural Enterprises to facilitate farmers’ access to advisory, quality inputs and markets
- 

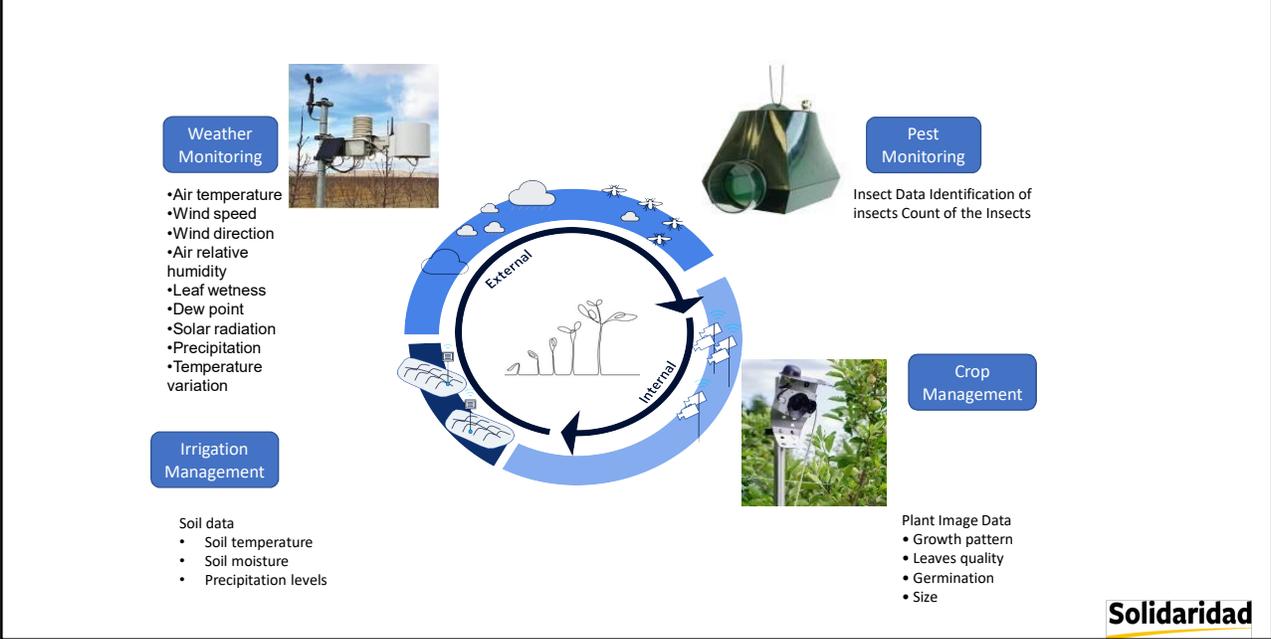
Transition from traditional delivery channels to ICT-Enabled channel for Smart Agriculture Advisory



The partnership with Vodafone India Foundation and Indus Towers Limited is facilitated for integration of IoT solutions



AUTOMATIC WEATHER STATIONS AND SMART SENSORS BASED TECHNOLOGY TO MAKE AGRICULTURE MORE EFFICIENT & SUSTAINABLE



SMART AGRI FARMERS ADVISORY SUPPORT SYSTEM



STRENGTHENING CAPACITIES OF FARMER PRODUCER ORGANIZATIONS (FPOs)



Training & Capacity Building of BoDs & CEOs



Quality Seed Production by Samarth FPO



Mobilizing Rural Entrepreneurs for better delivery of services



FPOs negotiating with Industry for market linkage

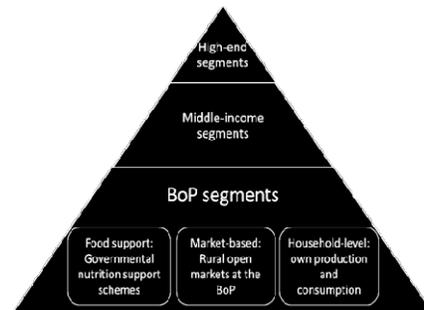
GOOD FARMING – GOOD FOOD

“SUSTAINABLE FOOD AND NUTRITION SECURITY AND TRANSFORMING SMALLHOLDERS’ LIVELIHOOD IN MADHYA PRADESH”

Pathway 1: Availability and affordability of soy and vegetables at farm and household level

Pathway 2: Availability, affordability and accessibility of nutritious soy products to the rural areas (BoP)

Pathway 3: Awareness raising to stimulate consumption of nutritious soy products and vegetables



Total 50,000 farmers are being targeted by the end of the project.



Project Partners



GOOD FARMING – GOOD FOOD



Questions/Suggestions/Additional Information

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