



**64<sup>th</sup>**

**ISO COUNCIL MEETING  
NEW DELHI 2024**

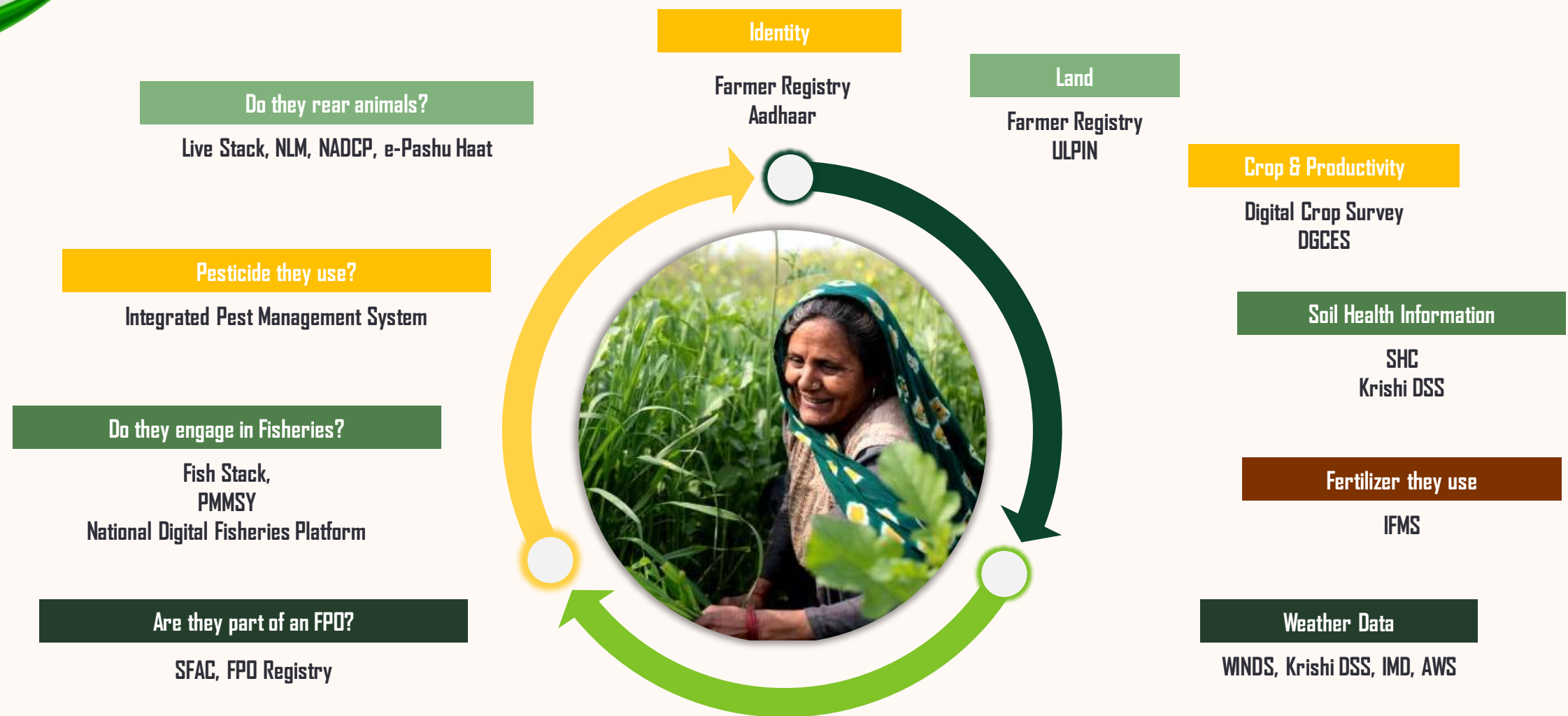
# **DIGITIZATION OF SUGAR SECTOR**

Exploring convergence opportunities with  
Digital Initiatives of Ministry of Agriculture & Farmers Welfare

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# Power of convergent ecosystems



Integrated view of schemes availed across various schemes...

Insurance, Income Support, Procurement, Subsidies, DBT, and many more...

**How can we help the sugar sector?**

# Better Estimation

with a once-a-year special survey during June/July for Sugarcane to capture all crop grown uniquely



Crop Surveyor captures:

- Fresh/Ratoon Crop
- Sowing date
- Season
- Crop Area
- Variety Type



w/h linkage to land parcel



w/h area-wise yield for the crop from GCES



and photograph as proof

## How can Sugar Department use this data?

- Production estimates well in advance
- Better & more accurate & localized planning for Sugar Mills
- Identify trends at village, district and state-level for better intervention planning
- Visibility on area-wise practices
- Centrally ability to monitor activity using data aggregated at village-level

Most of the top sugarcane producing states are already participating in Digital Crop Survey and Digital General Crop Estimation Survey

Convergence opportunity - Agri Stack & DGCES

# Better Monitoring

Using Remote Sensing, Ground Truthing, Weather conditions, and Pest Surveillance



## Crop Weather watch & Drought Monitoring

Integration of weather and drought related information from various sources and creating multiple GIS layers enabling co-relation, analytics, weather related advisory etc.



## Ground Truth Collection Library

Ground truth data from multiple sources such as DCS, GCES, Krishi Mapper, SHC, NPSS enabling visualization of farm level information from various systems at one place.



Real-time monitoring of trends using ICCC

Monitor trends in Sugarcane for timely interventions and infrastructure planning

Convergence opportunity –  
ICCC, Krishi DSS, WINDS, NPSS, SHC

# Better Procurement

Transparent procurements with ability to monitor diversions

## Farmer Registry

Farmer personal and Demographic details						Land Records record				
Farmer Id	Aadhaar number	Farmer Name	Farmer Name	Farmer Type	Residential address	Farmer Photo	Distric/ Tehsil/ Village	Survey No.	Farm Id	Subot (In Hectare)
0750453457	XXXXXXXXX230	Saravah	Kishorebabu	Small	D. Kolar T. KGF V. Attar		Kolar / KGF / Attar	15	KAS42007909 1	0.20
							Kolar / KGF / Attar	20	KAS40007609 1	0.15
							Kolar / KGF / Chikkabellu	21	KAS42008003 1	0.50
0750453457	XXXXXXXXX230	Saravah	Saravahbabu	Big	D. Kolar T. KGF V. Attar		Kolar / KGF / Attar	0	KAS40007909 1	1.00
							Kolar / KGF / Attar	10	KAS40007909 1	2.10

## Estimates based on field data



## Verified by remote sensing technologies



Sugarcane procurement from Farmer as per what they have grown

Efficient procurement directly from the farmers and payments directly to their Aadhaar-linked bank accounts

Faster and more transparent procurement from the actual farmer

Convergence opportunity –  
Agri Stack (Farmer Registry, Digital Crop Survey)

**And many more possibilities...**

**THANK YOU**