



Food and Agriculture
Organization of the
United Nations



Insoilfer

The International Network on Soil Fertility and Fertilizers-INSOILFER: Goals and Potentialities

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INSOILFER Co-coordinator

30
January
2024

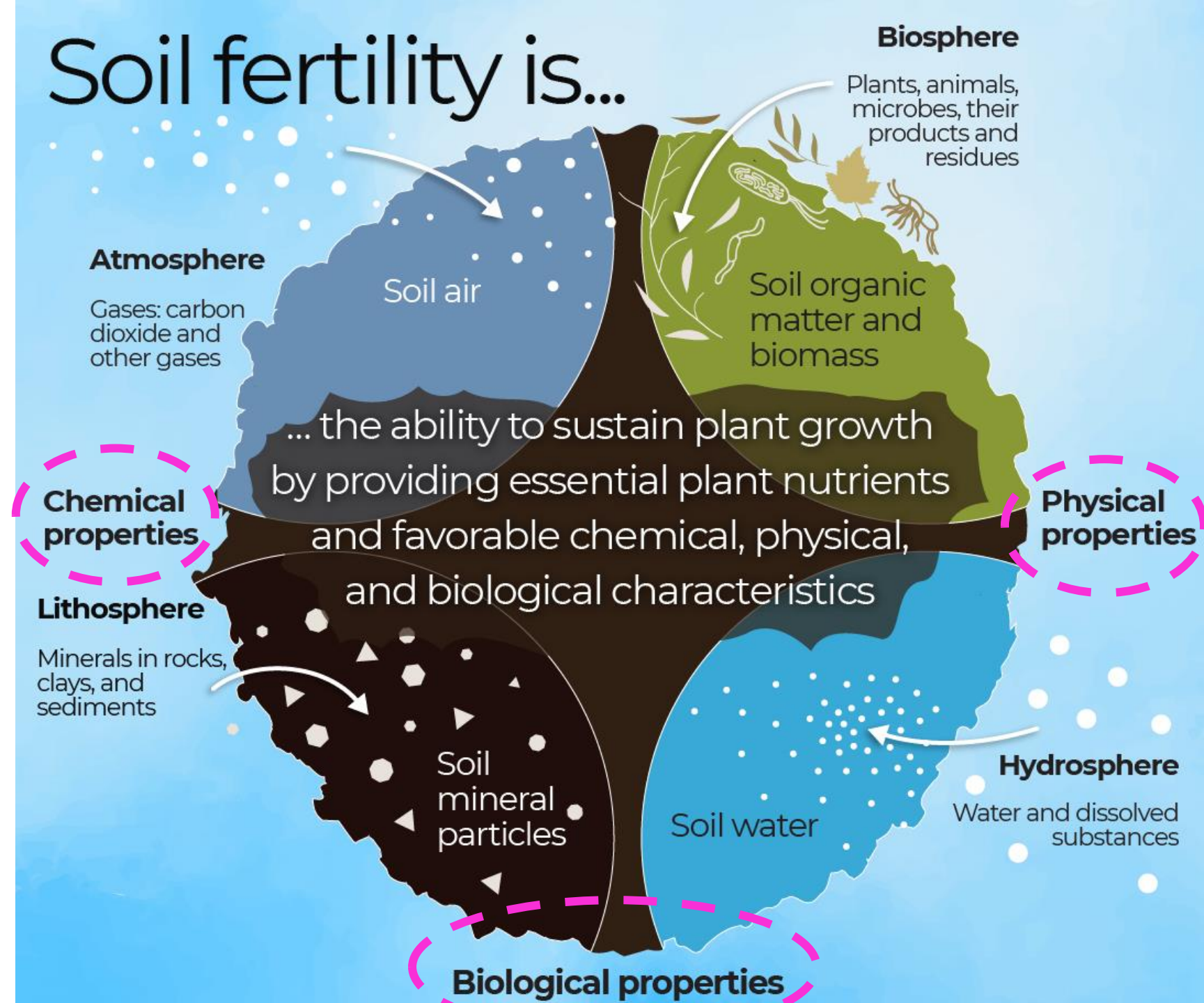
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Soil health as a prerequisite for crop
production: the relevance of organic
fertilizers



INSOILFER has an integral concept of soil fertility at the core of the actions

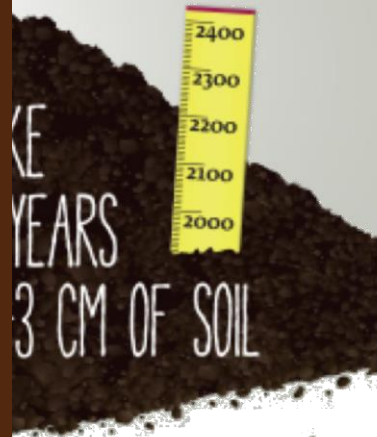
Paradigm shifts oriented towards providing the best physical, chemical, and biological conditions to enhance soil nutrient availability and plant uptake are required



Soil degradation constrains food security



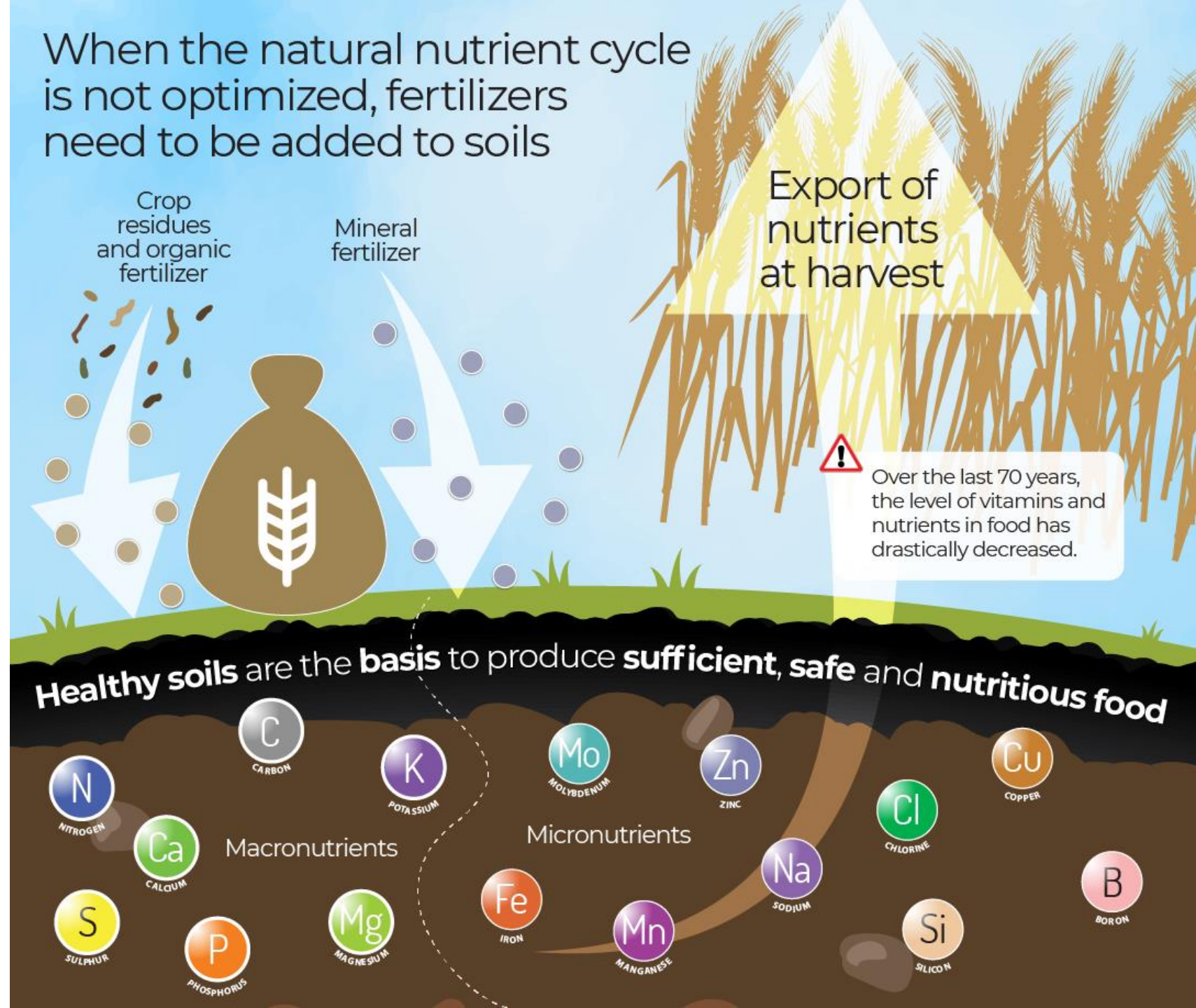
95% OF OUR FOOD COMES FROM OUR SOIL



INSOILFER aims to contribute to the sustainable management of fertilizers

Avoiding fertilizer overuse, misuse and underuse

When the natural nutrient cycle is not optimized, fertilizers need to be added to soils



Bring back nutrients to soils



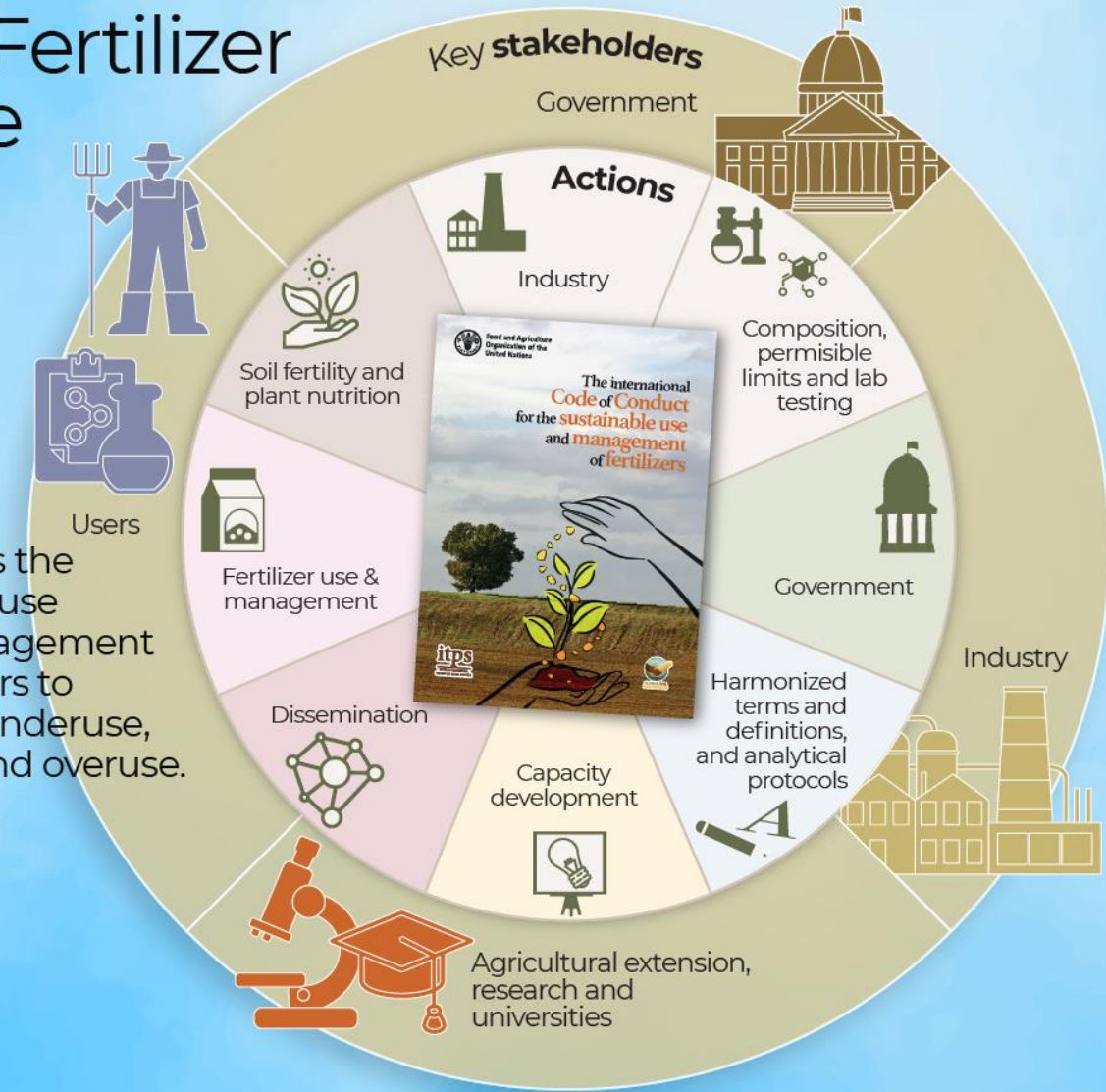
INSOILFER aims to contribute to restoring soil nutrient balance

6 actions to prevent and reverse nutrient imbalances

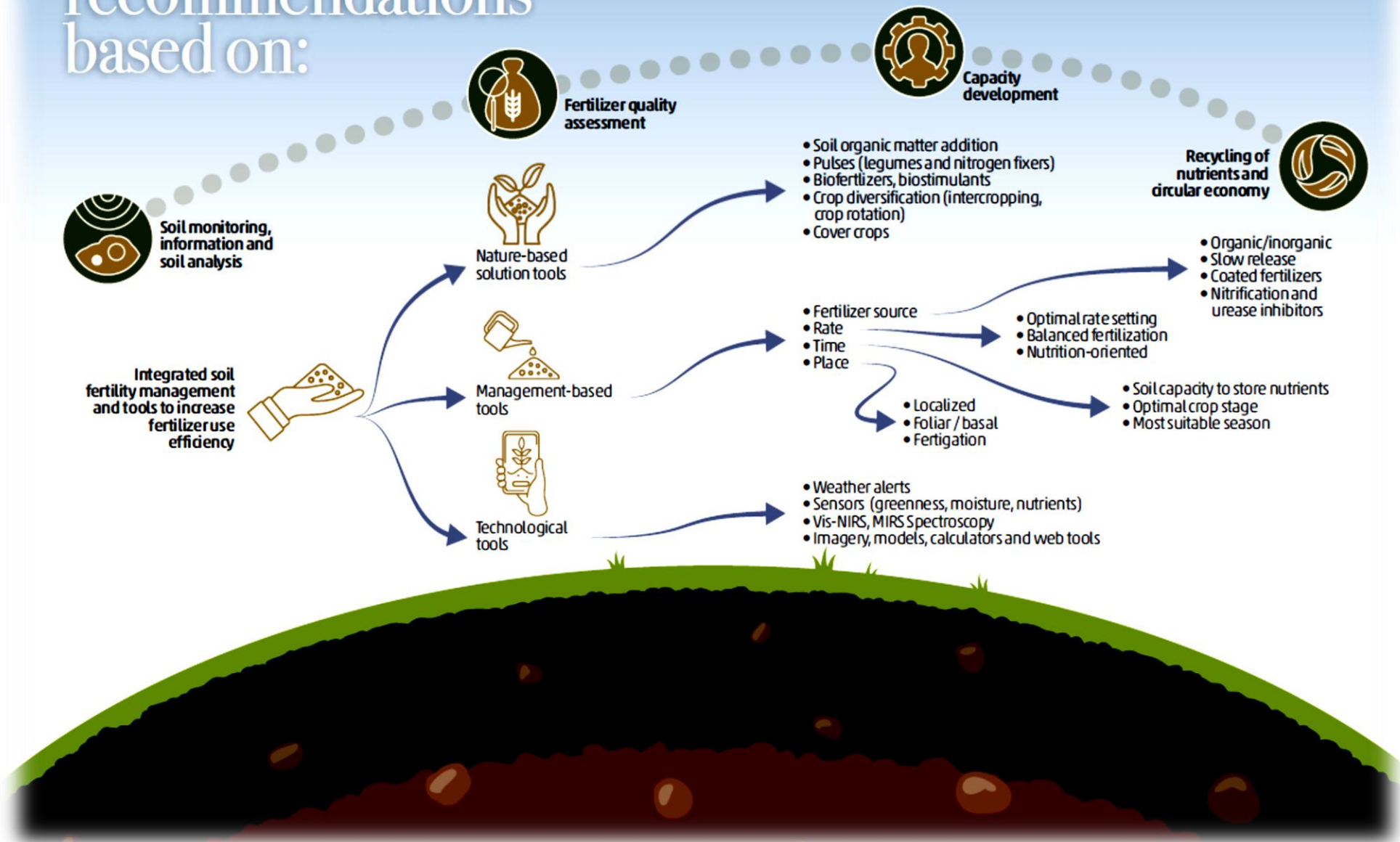


The Fertilizer Code

addresses the judicious use and management of fertilizers to prevent underuse, misuse and overuse.



Fertilizer use recommendations based on:



INSOILFER targets



1. Harmonization laboratory analytical protocols for the safety and quality assessment of fertilizers

- Sample preparation
- NPK
- Heavy metals
- Biofertilizers



2. Capacity development for quality assurance of analytical procedures and laboratory staff performance

- Ring test 2024 (NPK)
- Webinar series and trainings on quality assurance



3. Regulations and policies on the safety and quality of fertilizers

- Customs procedures
- Regulations and permissible limits for heavy metals

Establishment of an environmentally friendly and nutrition-sensitive (not exclusively yield-oriented) fertilizer recommendation system

INSOP, NETSOB, INSAS, INBS
GLOSOLAN- harmonization of the soil test kit and field soil test and interpretation

Specific INSOILFER potentialities



Soil fertility and nutrient **monitoring** system
Soil Nutrient Monitoring System



Soil fertility and fertilizer **management**
Fertilizer Recommendation System



Fertilizer safety and **quality**
Globally harmonized metrics



Contribute to food security



Restore soil nutrient balance



Improve nutrient-use efficiency



Improve agricultural production

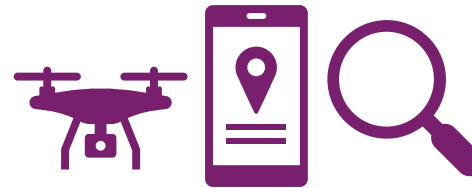
What are the potentialities of a network specialized in soil fertility and nutrient dynamics?



Reduce environmental impacts of agriculture



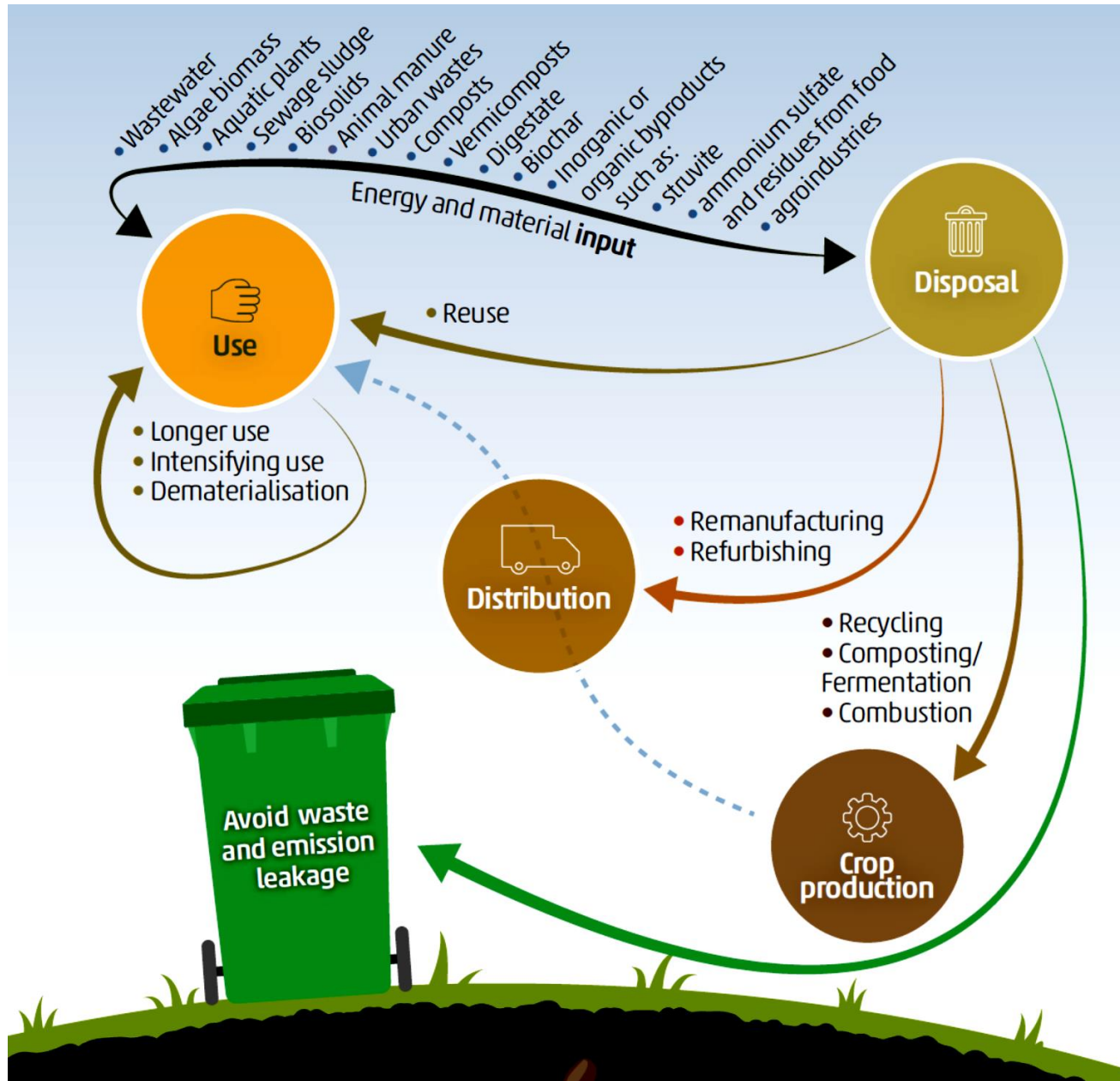
ID and empower sustainable cost-effective agricultural management practices



Improve monitoring approaches



ID and address policy gaps on fertilizer regulation Q/S



Alternative nutrient sources and innovations are necessary to restore nutrient balances



যাফাপুর ইউনিয়ন পরিষদ
ও
সারা বাংলা কৃষক জোটের
কল্যাণকর কার্যক্রমের ফলস্বরূপ
কৃষকদের মাঝে বিতরণ করা হয়েছে।



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Thank you

insoliter
International Network on
Soil Quality and Fertilizers



GLOBAL SOIL
PARTNERSHIP

Global fertilizer crisis



Social factors changing the global outlook



- Sanctions
- Federal
- 40 per
- The re
- fertilizer
- especially for



Supply shortages triggering price hikes and risking farmers



Higher prices leading to soil nutrient crisis

Soil fertility loss has been exacerbated by the global fertilizer crisis

- P and K stock concentration and manufacturing in a few countries compromise their affordability and availability and directly affect food production.
- About 90 percent of P stocks are concentrated in five countries (China, India, Morocco, the Russian Federation, and the United States of America), while more than half of potassium (K) is found in three countries (Belarus, Canada, and the Russian Federation)
- Food systems are responsible for a third of global anthropogenic GHG emissions

zter accessibility

food production

s

pacts for farmers

effective