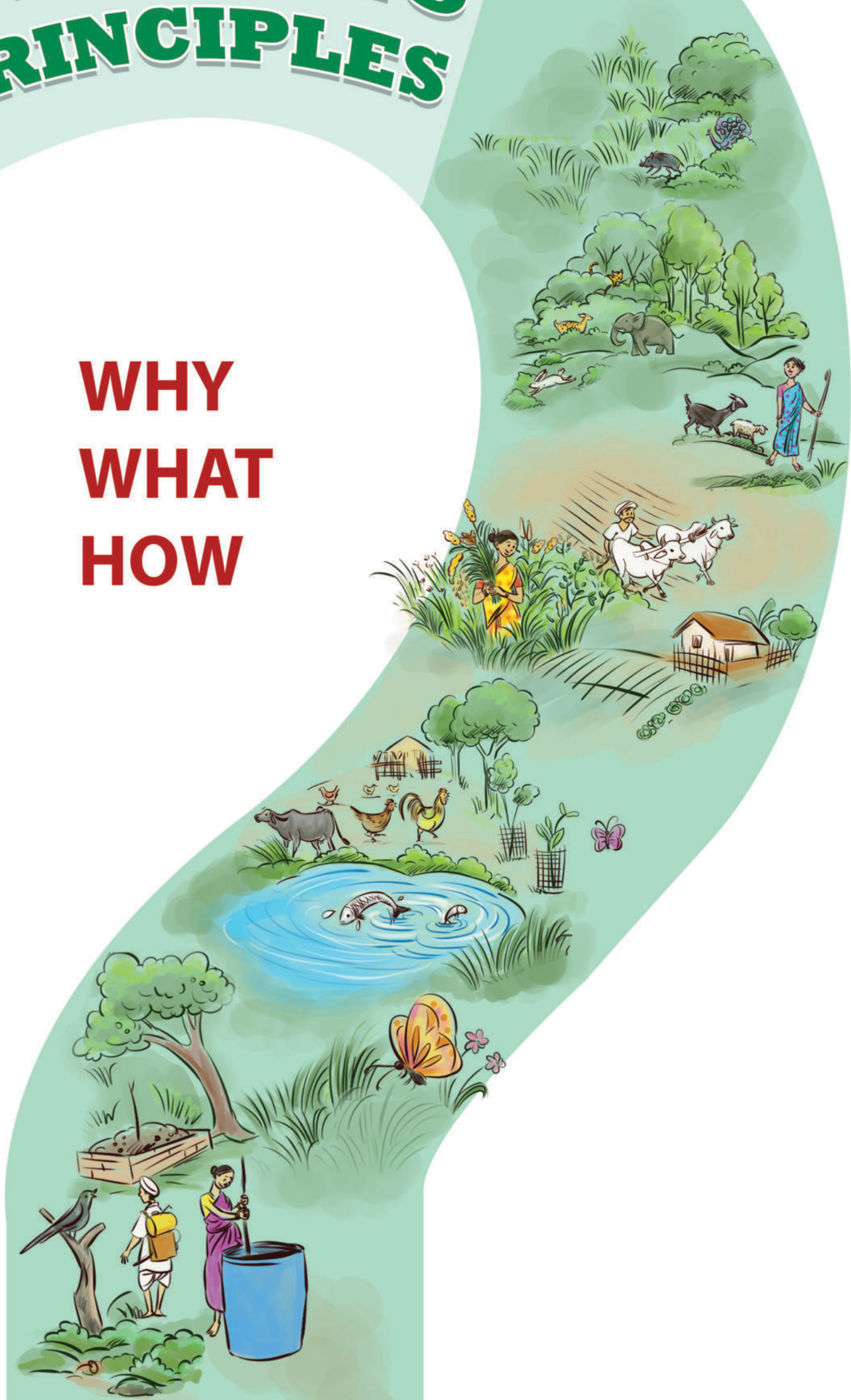
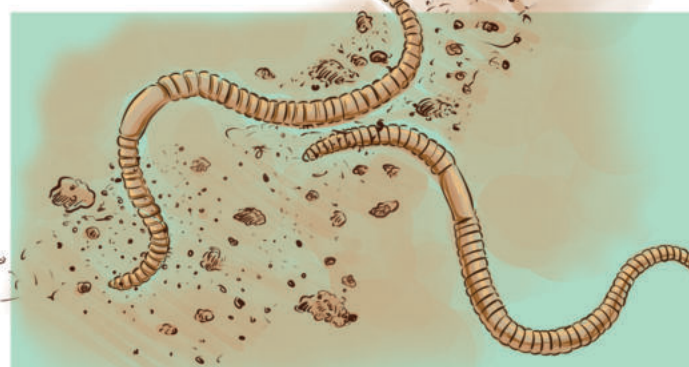
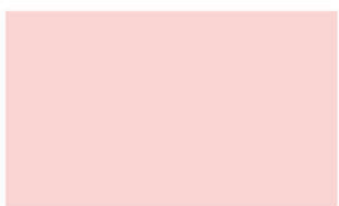


# UNDERSTANDING NATURAL FARMING PRINCIPLES

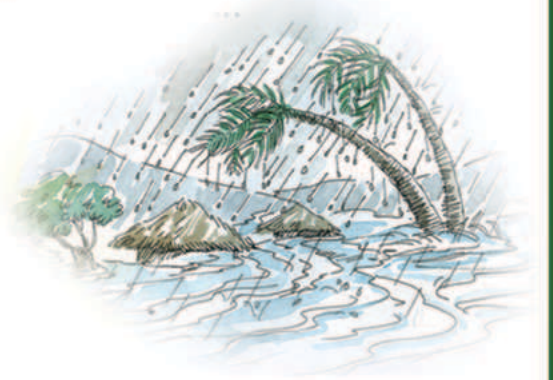
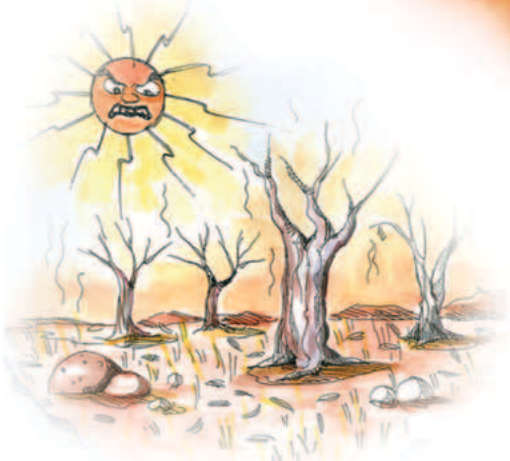
WHY  
WHAT  
HOW



Awareness Generation Material on Natural Farming



# Have you observed?



**Environment is Degrading**

**Risk becoming Unbearable!**

## Everything has become Poisonous !

Costs increasing but pests & diseases are not controlled

Ill effects on humans (Cancer strains)



**Reduced incomes and increased risks like a see-saw game!**

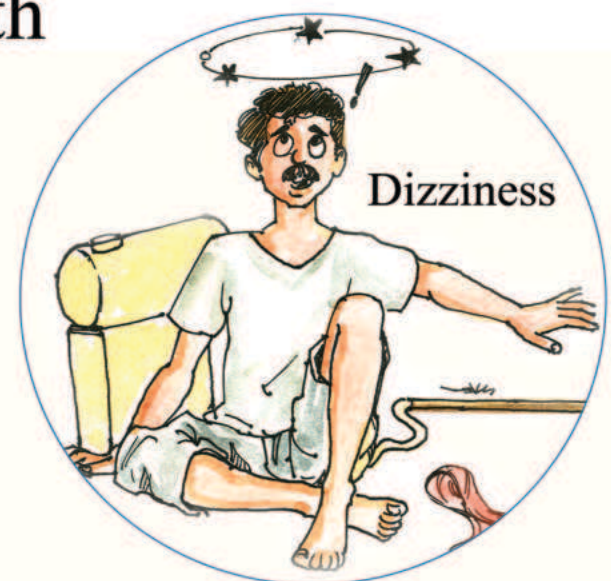
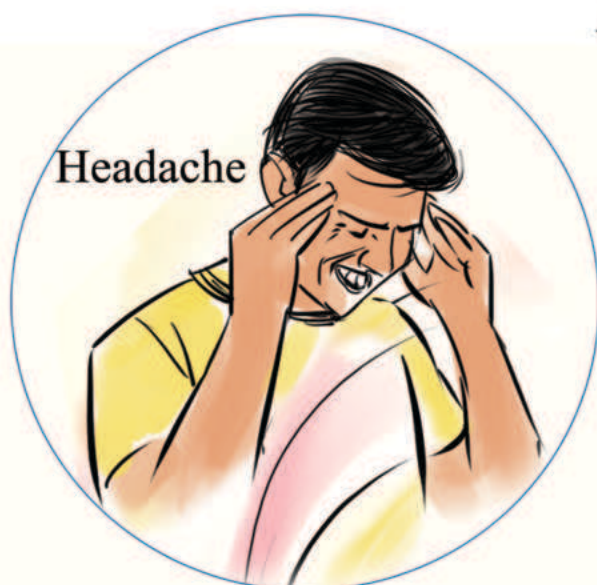


# Effects of Pesticides

It is a Poisonous Trap  
Everything it harms us



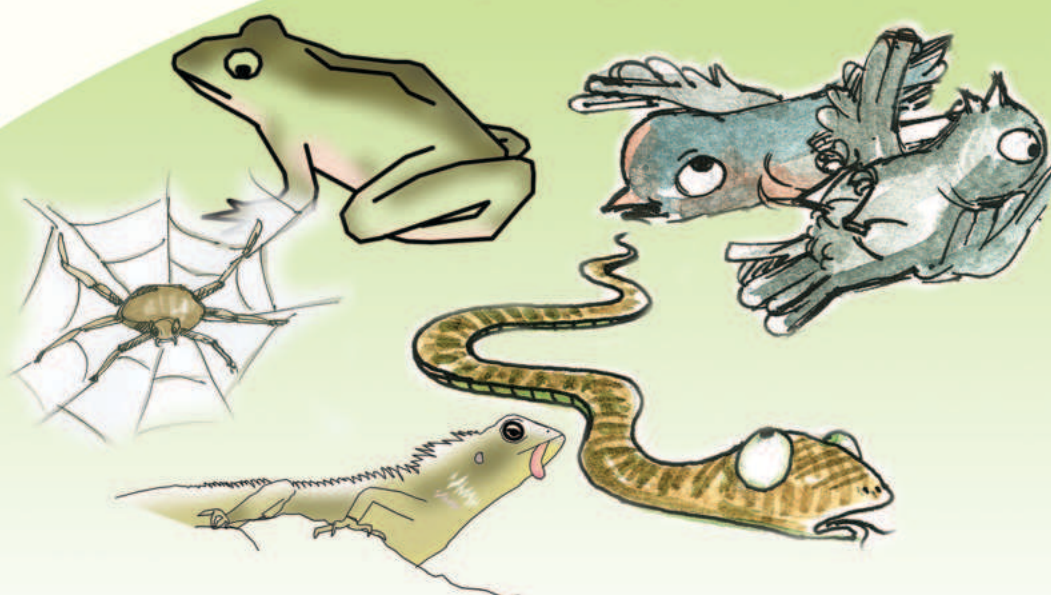
## Effects on Human Health



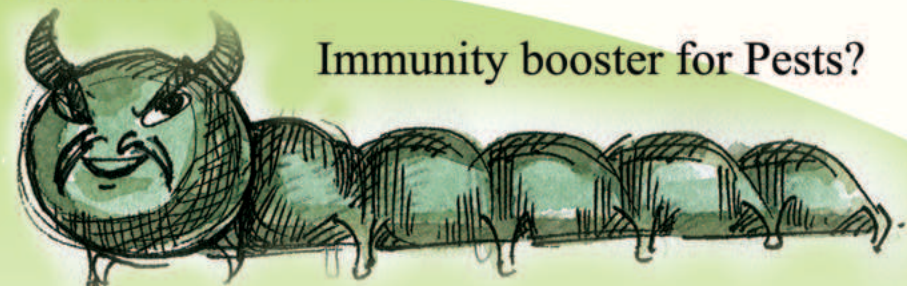
... Several such negative effects on humans (short term & long term)

## Effects on Environment

Threatening Living System



Immunity booster for Pests?

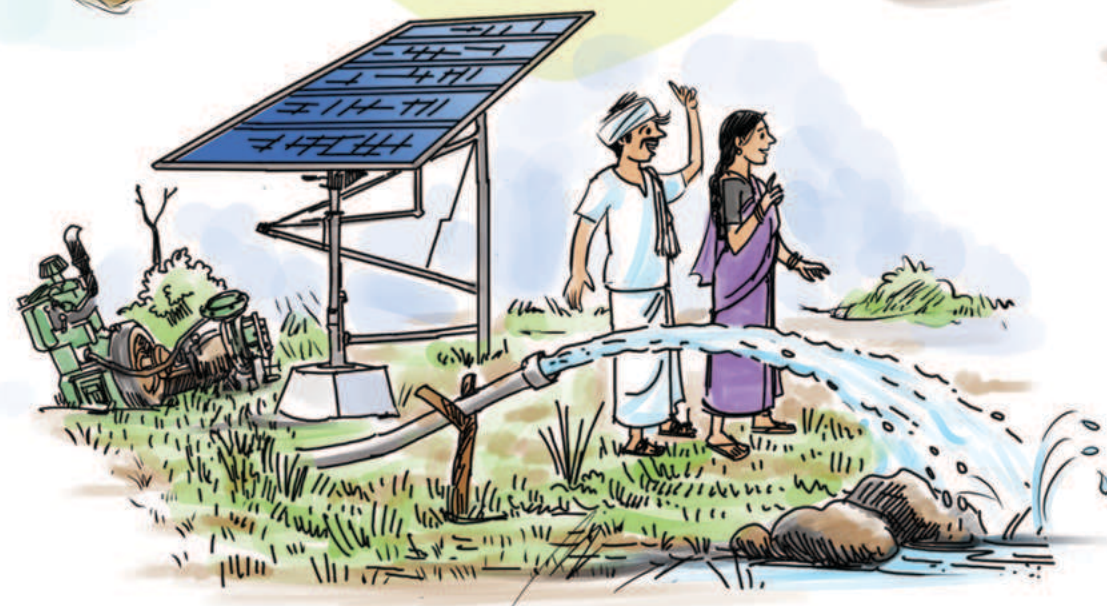


Some become pesticide resistant ...  
Chance for some more new Pests



# LET US FILL LIFE ...

## In our Soils, in our own Lives and our Environment



# Key Principles of Natural Farming

## Possible only with Farmers' Collectives

**1**  
Crops/ organic soil cover – 365 days



**2**  
Diverse cropping system with trees



**3**  
Minimal disturbance of soil



**4**  
Integration of animals



**9**  
Pest management through Botanical extracts



**5**  
Bio inputs as necessary catalysts



**8**  
No Synthetic Fertilizers, Pesticides, Herbicides



**6**  
Increase organic matter in the soil

**7**  
Use locally adopted seeds



# Components of Natural Farming

## Seed treatment



Using Local seeds and treating the seeds with Beejamrith

## Soil Nutrient Enhancement



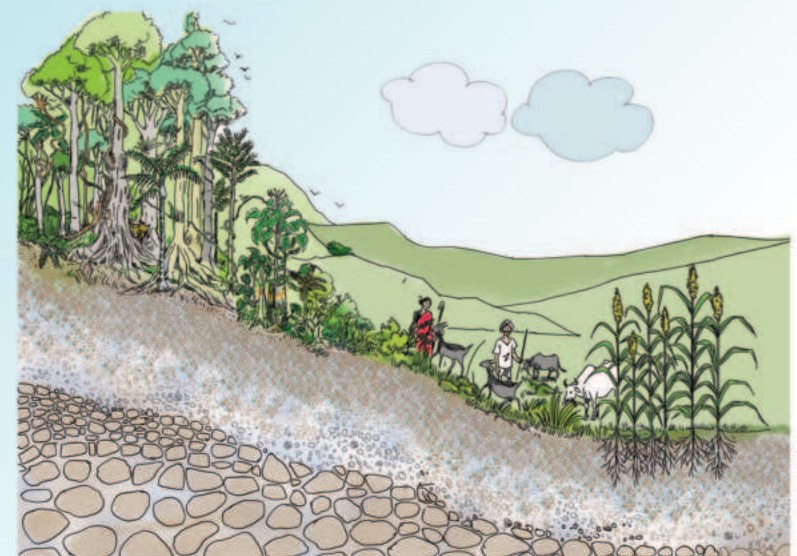
Using Farm inputs like Jeevamrit  
Enhancing nutrient availability to plants

## Soil Cover (Mulching)



Managing the soil cover for 365 days with live crop or crop residues

## Soil Porosity



Ensuring both air and water molecules in soil cavities

## Plant Protection

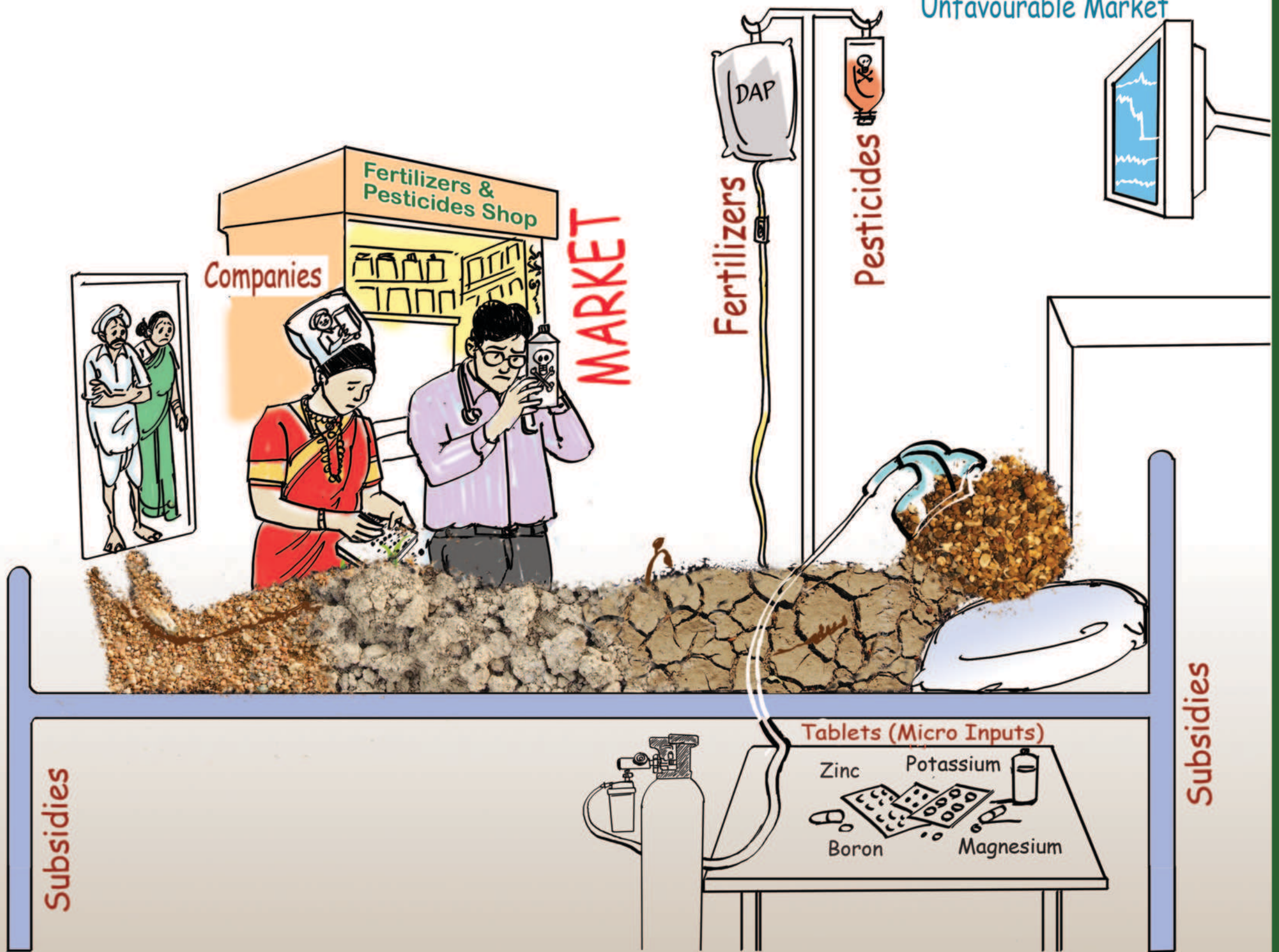


Through Integrated Natural Farming Practices -  
Diverse crops and Need based inputs

# Our Soils are in ICU

## Can we remain passive observers?

Weather conditions  
Improper Yields  
Unfavourable Market



## How long we sustain them artificially?

# How about your Soil...?

I've Black Soil



Water gets stagnant even for a small rain...  
crop gets damaged with  
inundation...

It's Red Soil



Water sinks so deep into the soil  
that even roots cannot reach...  
without sufficient moisture,  
crop growth is affected ...

Mine is Saline...!!



With heavy salinity,  
there is no strength in soil..  
Whatever seed I sow,  
it does not germinate...

Whatever type of soil it may be...

**It should have Water holding capacity  
and improved biological activity**

It should contain...  
**Organic matter  
Green cover**



it should have...  
**Moisture retention capacity  
Water holding capacity**





# What is good for Soil Health?..



Does using chemical fertilizer and pesticides improve soil health?



No, in fact they are degrading the soil properties and it's health

## Why should we improve soil properties?

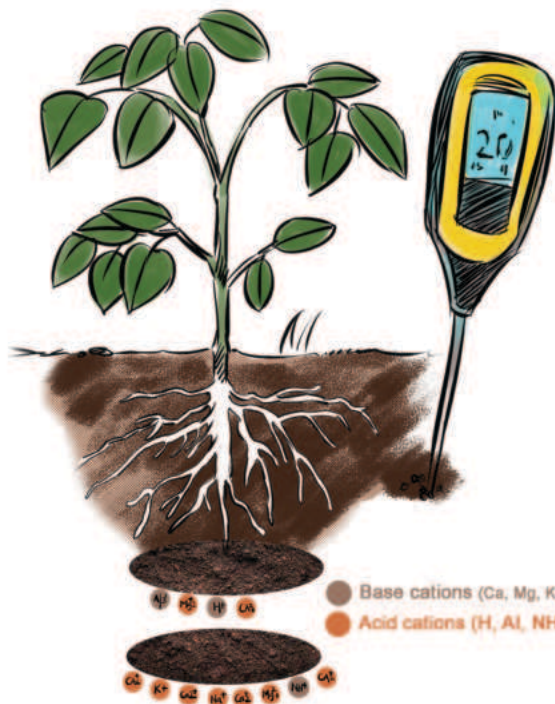
### Improved Physical, chemical properties

- Facilitates soil aeration
- Enhances soil aggregation
- Improves water holding capacity



### Increase the soil organic carbon

- Balances pH
- Cation exchange



### Improve the Biological activity

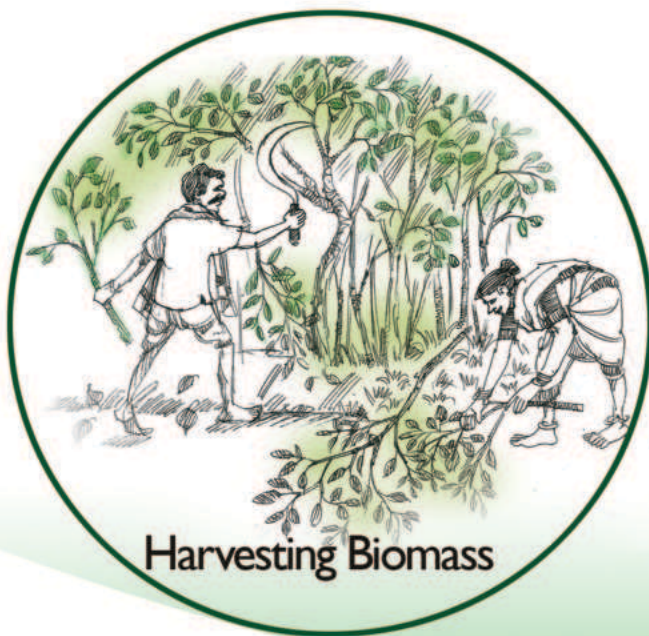
- Encourages more 'life' in the soil (with increased number of earthworms, microbes etc)
- Improves soil biology (Due to Bio inputs, Soil cover/ Multi cropping)



“Natural Farming starts with Regenerating Life in the Soils”

# Enhancing Soil Health Through Innovative Practices

## Cultivating Biomass on Bunds for On-Farm Use



## Raising crops for In-situ application

Diverse Green Manuring Crops/ Pre-Monsoon Dry Sowing



Relay Cropping



## Covering the Soil with Mulch



# Measures to Improve Soil Health

## Reducing Tillage



## Managing Field Residues



## Application of On - Farm Cow based Manures



## Drava Jeevamrutham

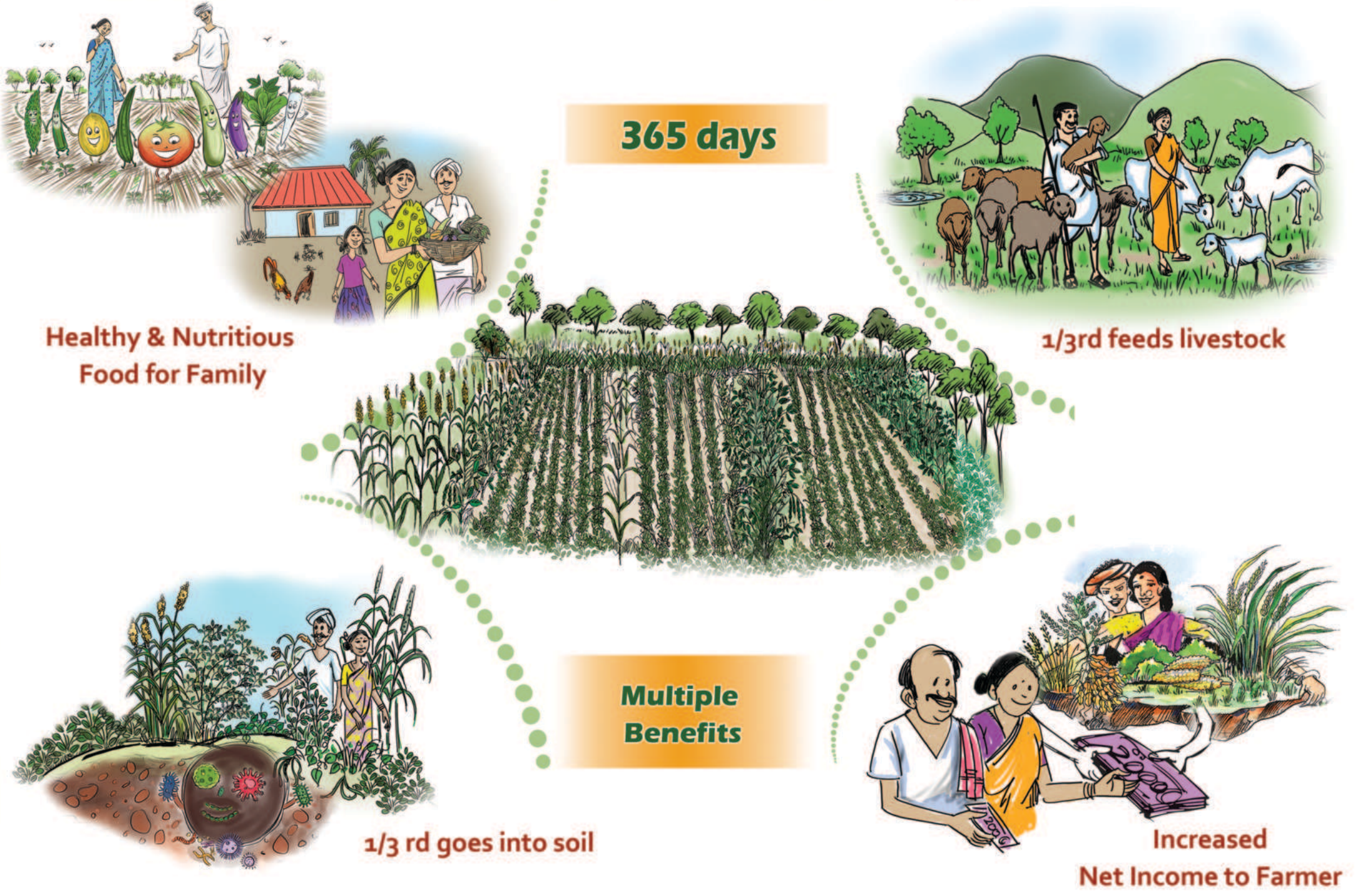


I am thinking to adopt natural farming principles or improving our soil health and net income!!



An excellent idea with numerous advantages – from revitalizing soil health and providing livestock feed to boosting net incomes

## Cover the Soil with Diverse Crops & Trees



## Farm Field is the best source for Organic Matter!



# Diversified Crops need Diversified Seeds...



Why Struggle with Market Seed?

Use Local Seeds for Natural Resilience & Adaptability



Chance for raising Fodder, Grass & Plantation

Opportunity for resowing during crop failure

Seed availability for Intercrops



Suitable to Local Soils



Quality under farmer's control



Suitable to Local Climate



Withstand rainfall variations



Availability in time

# Once Farmers used own Seeds...! Why Can't Now?



Harvesting for seed



Suitable Varieties



Control over Production



Multiple Varieties



Saving for Future Needs

## Ensuring Farmer/Community Control over Seeds



Suitable for Local Conditions



Timely Availability



Sufficient Quantity



Assured Quality



Local Availability



Seeds for Diverse Crops

# Transition of Farmers from Conventional Practices to Natural Farming

3rd Year



2nd Year



Arranging Local seeds & analysing suitability



Crop yield analysis

1st Year



Arrangements for Cow urine/ Dung collection



Preparation of on field inputs



Confidence on all the NF practices - Seed to Seed (Jeevamrit, Mulching, Intercrops etc)

Farmers try a few/all NF practices in some patch of their agricultural lands



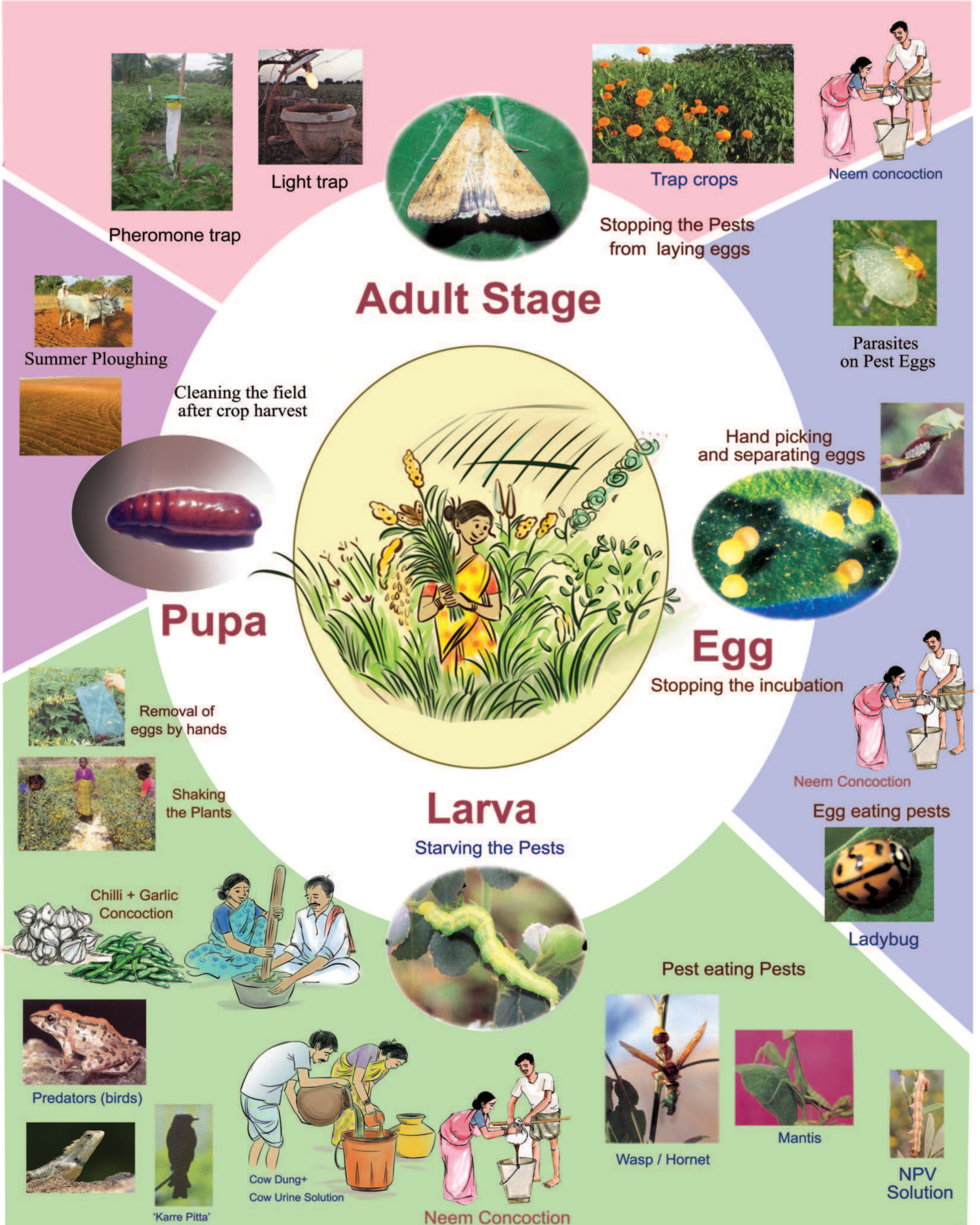
Krishi Sakhi training farmers



Field visit  
Prakritik Kheti Paathshala

Farmers ready to try Natural Farming in Kitchen gardens for self-consumption

# Natural Pest Management



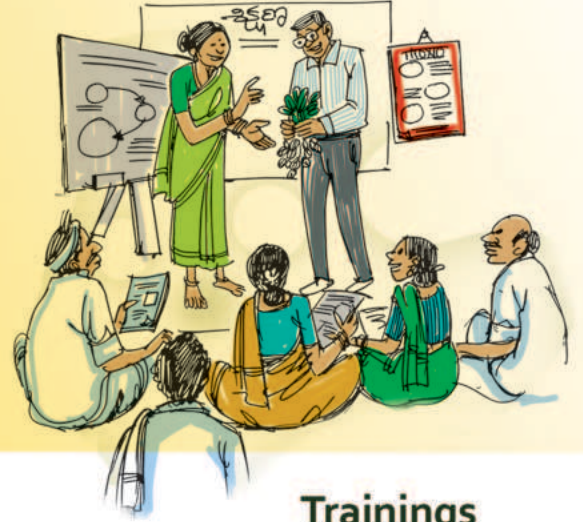


# Key Strengths to Natural Farming

## Farmers' Knowledge & Local Innovations



Field Demonstrations



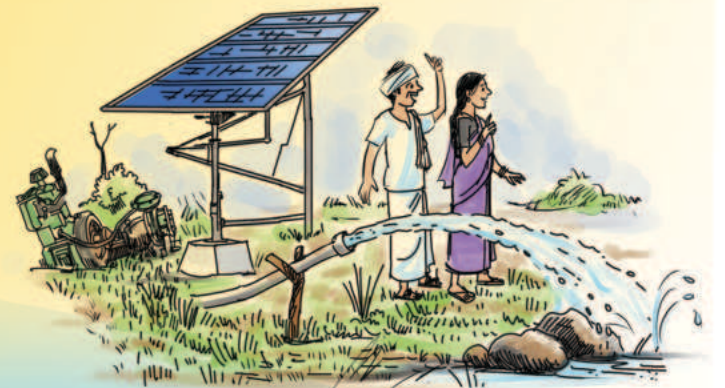
Trainings



Farmer to Farmer



Knowledge sharing



Innovations

### Women Groups & FPOs Driving Forces for Natural Farming



Services & Market Linkages



Critical Infrastructure



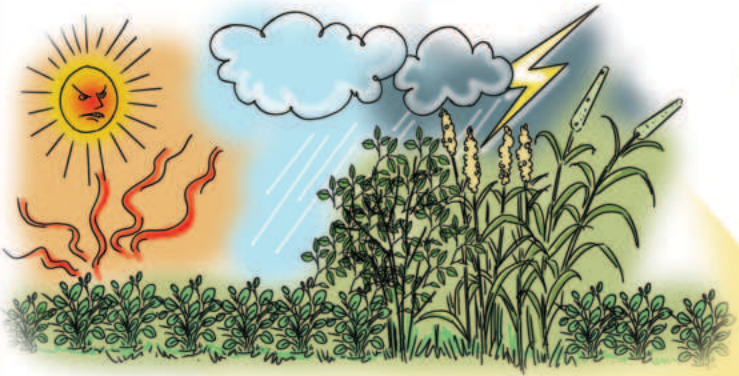
Value addition & Processing



Input support through  
Bio Resource Centres

# Prosperity with Ecological Security

## Multiple Benefits with Natural Farming



Protection from Climate Risks



Rejuvenation of Farmlands



Less water for Crops



**Healthy Soil**  
**Healthy Food &**  
**Healthy planet**



Reduction in cultivation costs



Fodder for our livestock



Multiple crop production



Healthy food for family