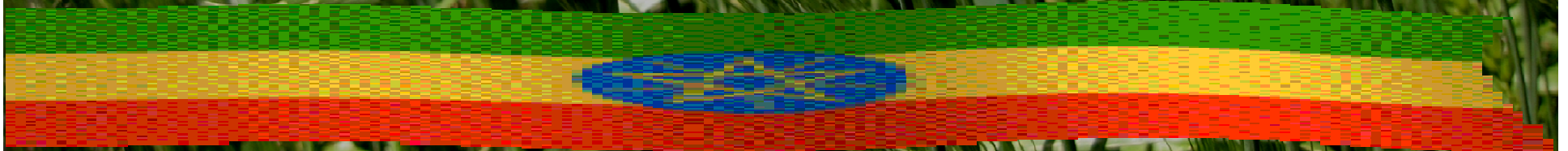


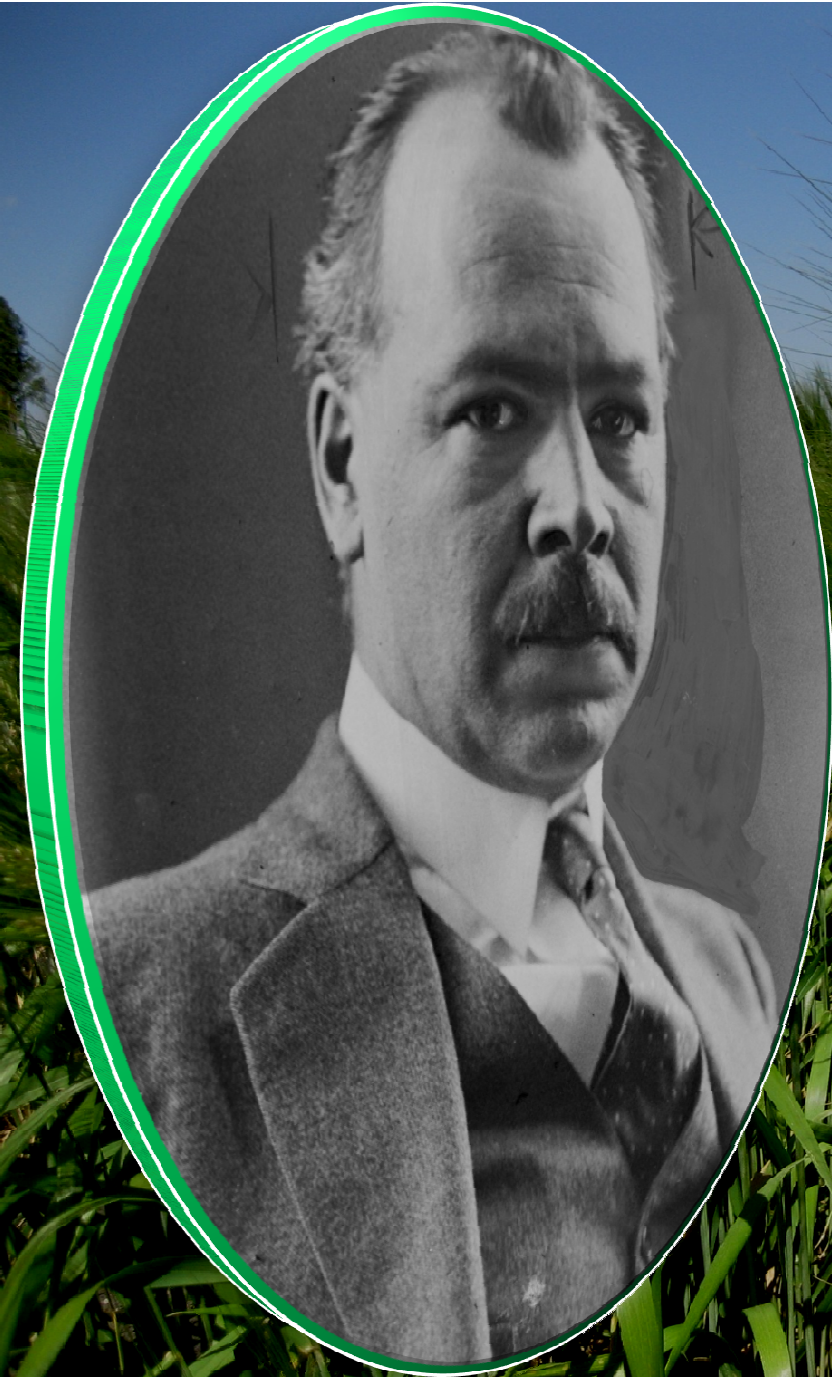
How to link GSPC with NBSAP in Ethiopia




Institute of
Biodiversity
Conservation

Alganesh Tesema





One of the most remarkable human beings is Nikolai Vavilov, the Russian biologist, botanist and geneticist who was the foremost plant geographer of his time.

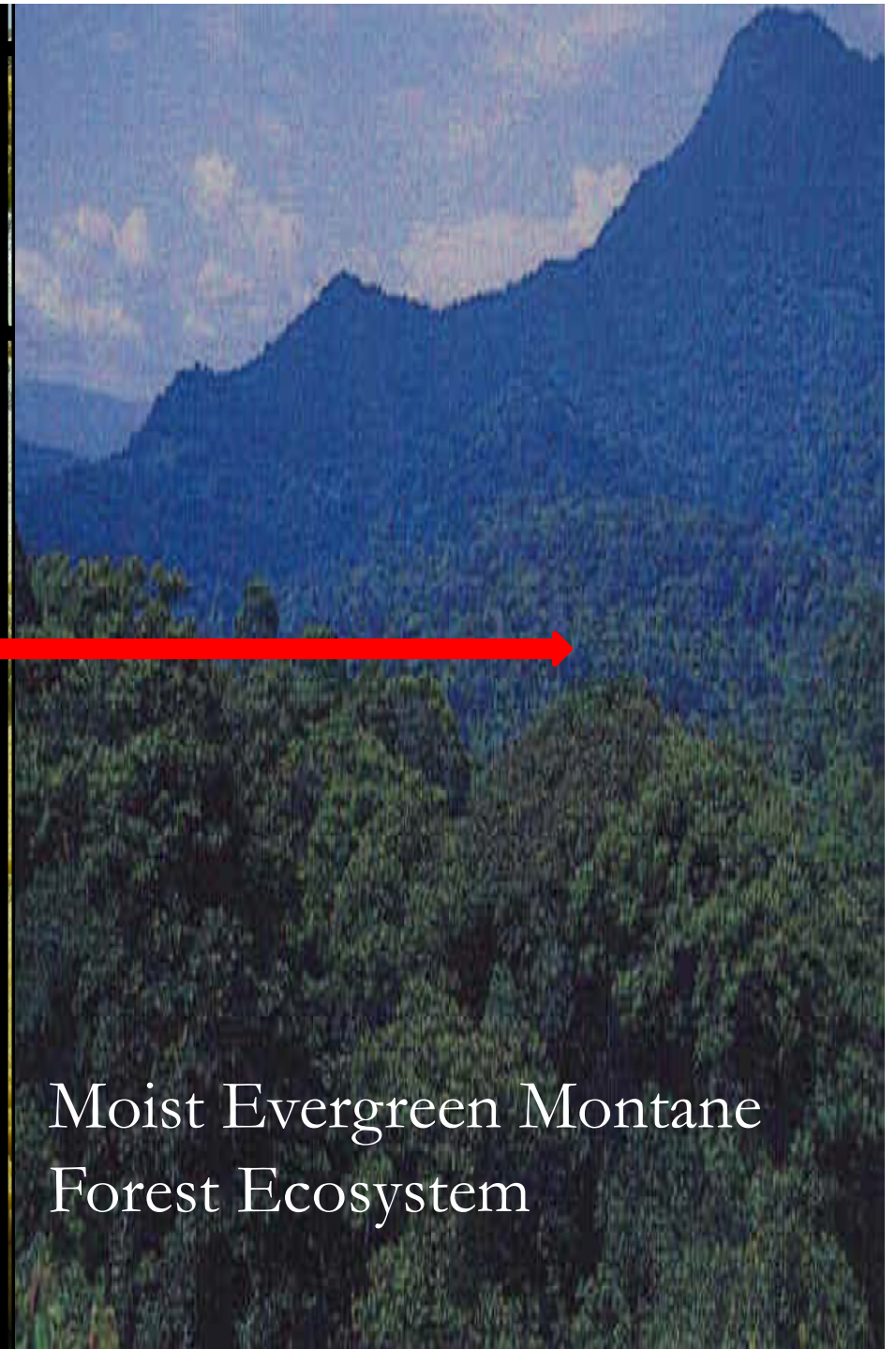


Secondary center for durum,
barley, faba bean, grass pea, pea,
lentil, chick pea, saff flowers,
pearl millet & others.

- The possible explanations
- Physical feature of the country



Desert
Ecosystem, Dolo,
Sidamo



Moist Evergreen Montane
Forest Ecosystem

➤ Chain mountains



➤ Altitudinal range

4620 m.a.s.l



120 m.b.s.l

➤ Great Rift Valley

➤ Rivers and lakes





Arabian sea
Indian ocean
Atlantic ocean

➤ Endowed Ethiopia to Center of genetic diversity





✓Homework I

● Stake holder for Ethiopian plant conservation

- 1.National herbarium
- 2.Research Institutions
- 3.Biodiversity Conservation
- 4.Agricultural Universities
5. Environmental Protection Authority
- 6.Ministry of Agriculture
7. Elder farmers , particularly poor farmers
8. Community gene banks
9. Pastoralists and semi pastoralists
- 10.Ministry of Finance and Economic Development
11. National herbarium
12. **Traditional healers**

Homework II.

✓ Do we have the right information & tools to gather information? Yes.

1. Ethiopian flora publication
2. Live library (elder farmers)
3. Traditional healers

6000/720



✓ Do we have information on threatened plants in-situ and ex-situ?

Yes,we can get information from local communities community gene banks, EIBCs gene bank and field gene banks

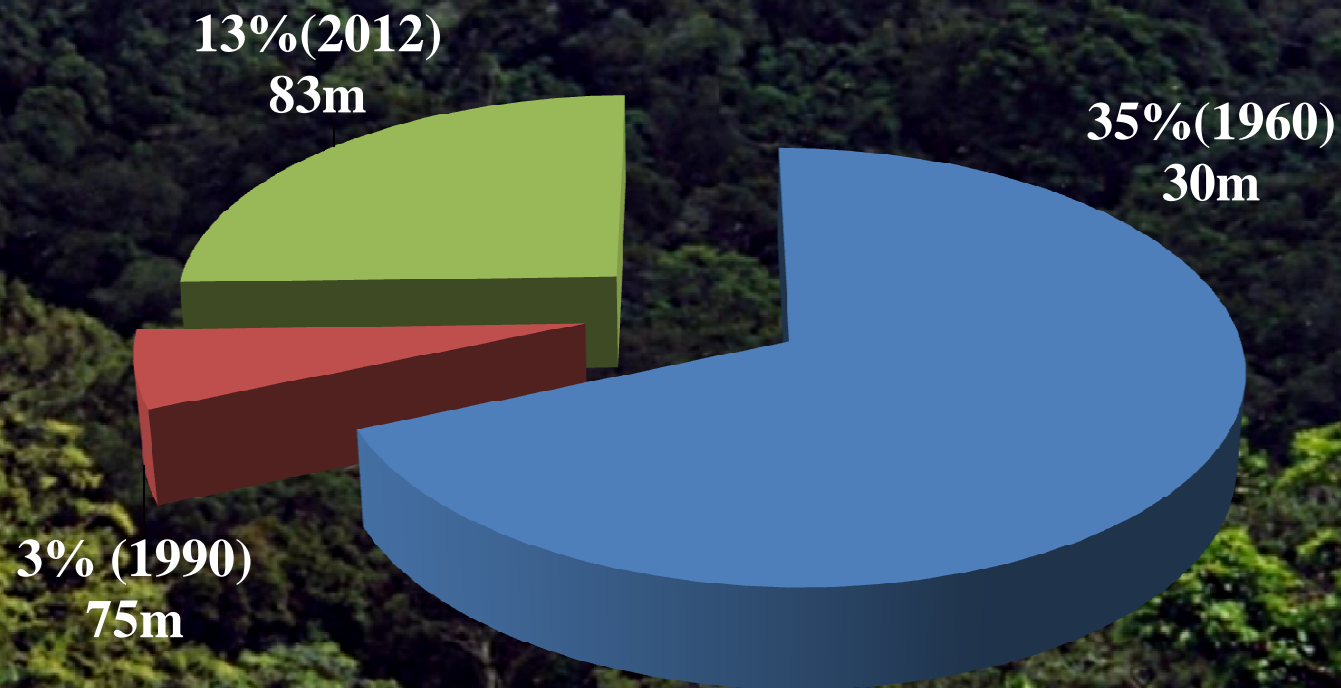
✓ Are protected areas working for the conservation of threatened plant species?

Yes,we have 6 protected areas conserved the threatened forest tree spp.

we have 12 community gene banks in different agro ecological zones 5 of which are conserved the threatened unique variants.

What we have done ?

✓ Inclination of Ethiopian vegetation cover



193,600 sq kilometer protected areas

•The statues of **Ex- Situ** Conservation

9000, 14%



58000, 86%

● cold room

■ field gene bank

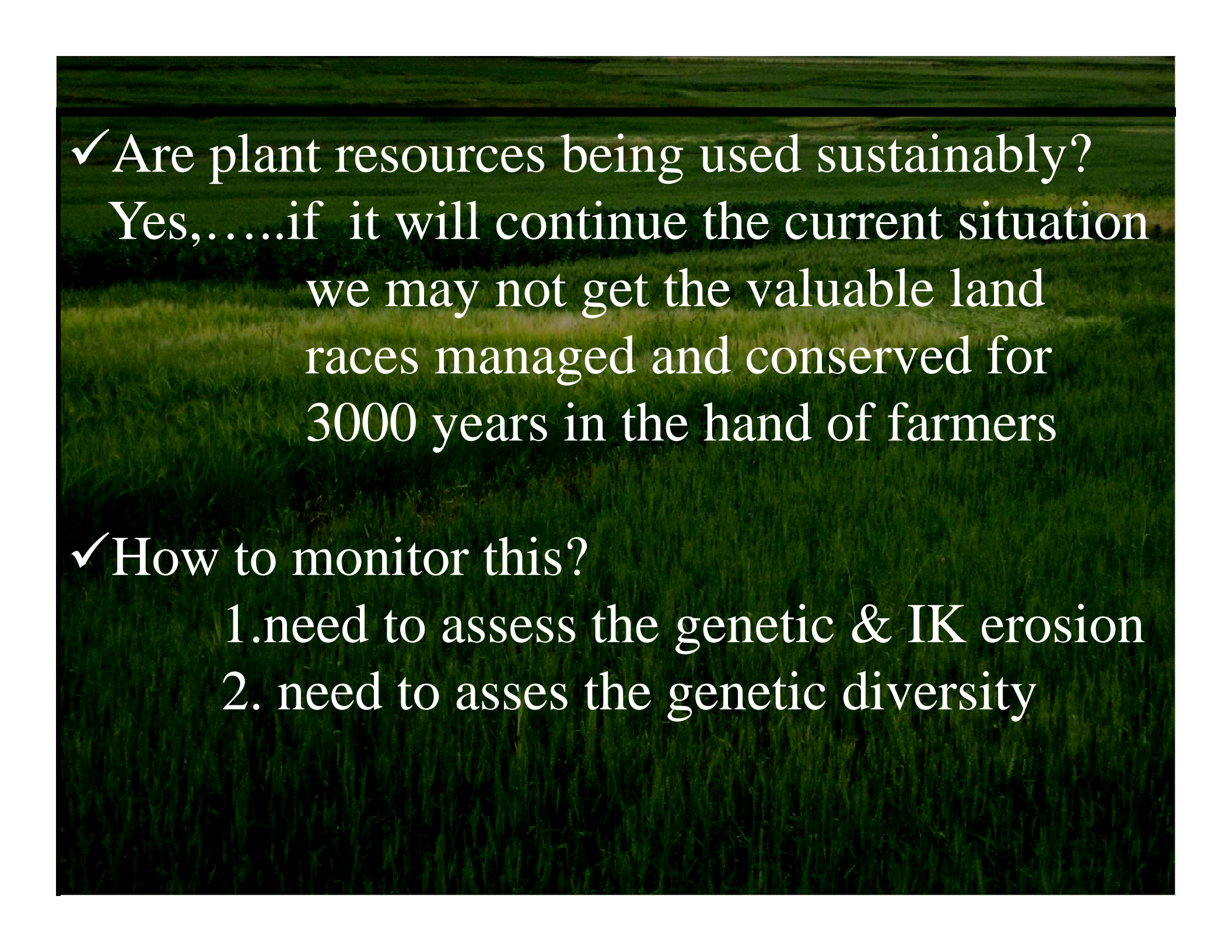
In-situ & ex-situ conservation

6 in-situ
protected
areas

7238 co, 30 root
& 71 spices

1787
acc. forage

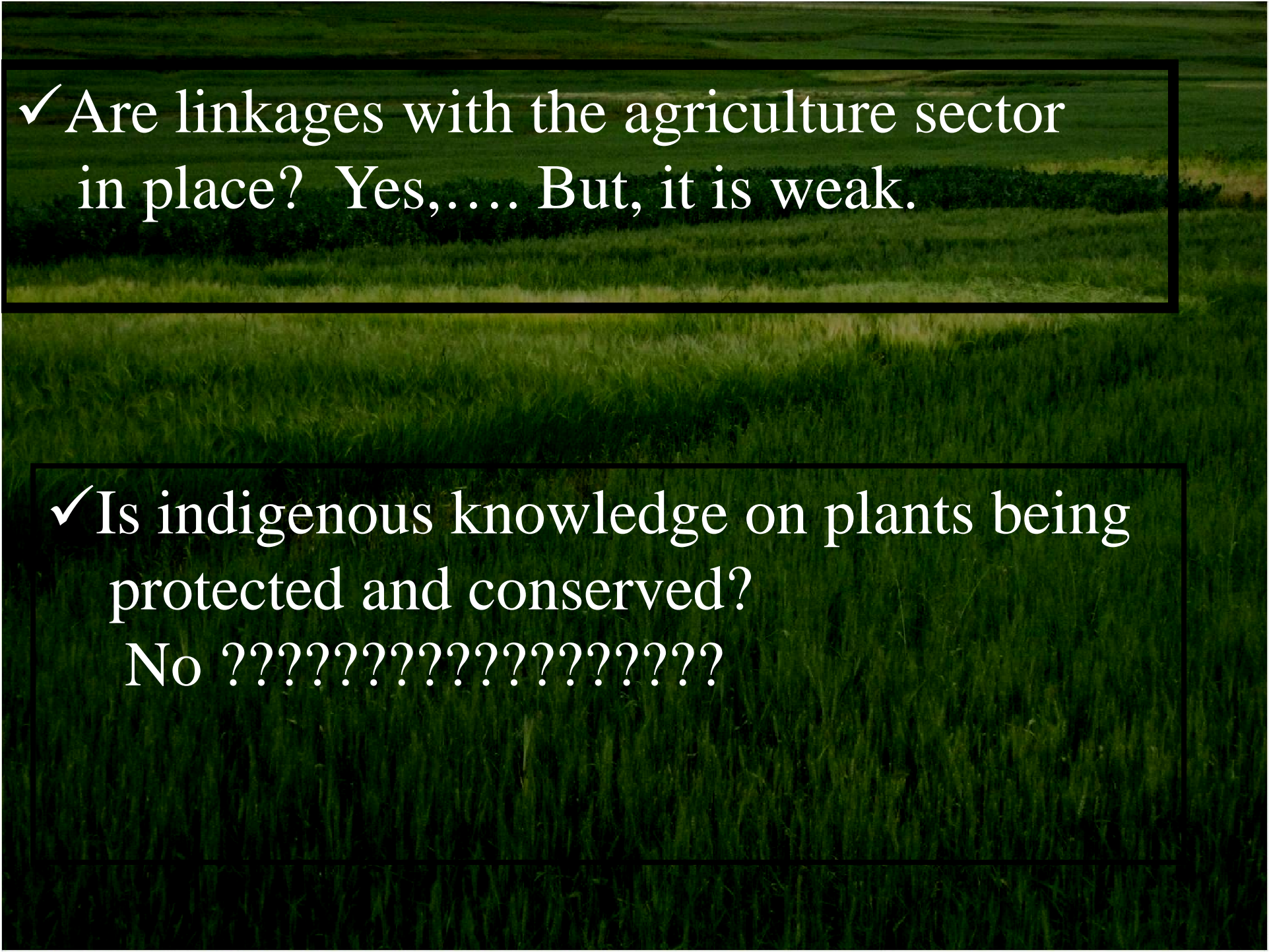
1086
acc. Medicinal



✓ Are plant resources being used sustainably?
Yes,.....if it will continue the current situation
we may not get the valuable land
races managed and conserved for
3000 years in the hand of farmers

✓ How to monitor this?

1. need to assess the genetic & IK erosion
2. need to assess the genetic diversity



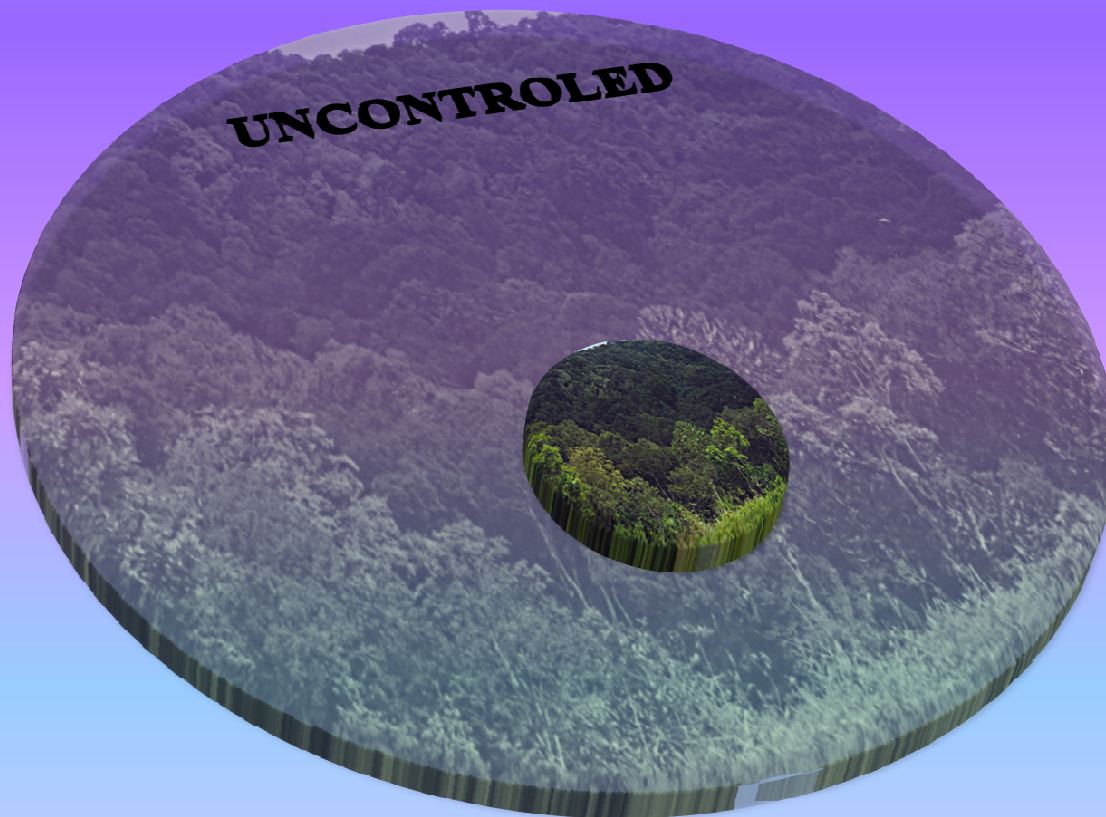
✓ Are linkages with the agriculture sector in place? Yes,.... But, it is weak.


✓ Is indigenous knowledge on plants being protected and conserved?

No ??????????????????

What's not

- In-situ conservation??
- Inventory??



A photograph of a vast, green landscape. The foreground is filled with tall, dense green grass. In the middle ground, there is a thick, dark green line of bushes or shrubs. Beyond this, the landscape continues with rolling green hills under a bright sky.

Which targets are familiarized to Ethiopia?
T1,T3,T4,T5,T7,T8,T10



✓What are the achievements from the previous NBSAP?

- Human resource development
- **Germ plasm acquisitions**
- **Establishment of field gene banks**
- **maintain the threatened indigenous spp.**
- **Awareness creation the entire region officials**



1. Human resource development

Documentation management....1

In-situ conservation.....5

Short term training in PGR.....2

BSc.....6

MSc.....2



2. Germ plasm acquisitions

- collected 5500 of 67,200 accessions**
- multiplied & rejuvenated 4,800**
- characterized 3200 accessions**
- Harbarium specimens 1500 samples**
- Utilization 35000 accessions**



3. Field gen bank conservation

- Ex-situ conservation.....3**
- In-situ conservation.....1**
- Botanical garden.....1**



4. Maintain the threatened indigenous spp.

- 15 spp of 300 accetions have been planted**

- at field gene bank**

- 30,000 of indegenous plant seedlings were prepared
and transplanted**



5. Awareness creation the entire region officials

- 3 persons of 9 entire regions were attended in the workshop**
- signed on memorandum of understanding for common goal**



✓ Impacts

- some regions tried to mainstream and internalize the BD programme
- created to have strong linkage b/n IBC and regions
- created generational responsibility
- Secured the genetic erosion



What are the gaps?

- Need more collection & evaluation**
- need more capacity building**
- policy development**
- advanced conservation method**
- need more awareness**

2012 – 2020 NBSAP progress in Ethiopia

- ☐ Establishing the steering committee
- ☐ Identifying stake holders
- ☐ Designed systematic network

What are the challenges today?

Cause & effect of
genetic erosion

Absolute
poverty

Over
populat

Land races
displaced

Narrow
genetic
base

No yield
increment

World = 9600/hour
Ethiopia = 193/hour

No unique
character

No diversity

No
variability

I. Demography pressure

II. Invasive Alien Spp

was inter
in the
agric
Natio
des
nat



research

Causes for Biodiversity loss

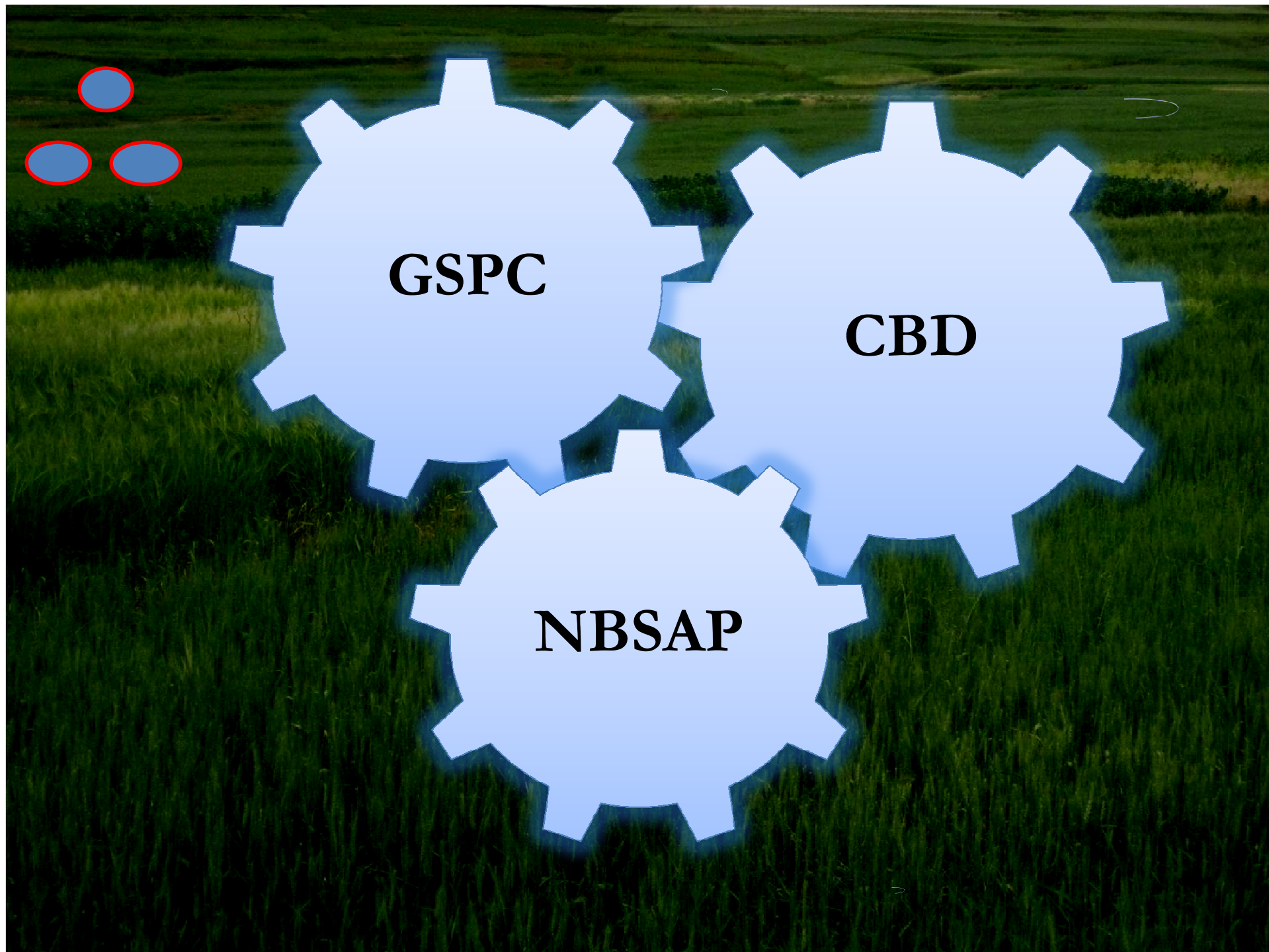
IAS

- Deforestation
- Overgrazing
- Over-cutting and unsustainable levels of harvest
- agricultural intensification

III. Climate Change

BDL

Ecological imbalance



The background of the slide is a photograph of a vast, green landscape, likely a grassy field or savanna, with a white rectangular box in the upper left corner containing the title.

The way forward

- **Enforcement of land use policy**
- **Regulating population growth**
- **Ensuring constant vegetation cover & solution for energy**
- **Synergy/Networking among all stakeholders**
- **Strengthening Biodiversity Curricula at all academic levels**

Special acknowledgement deserves

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Natasha

Robin

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Thank you

