AGROECOLOGY: A SUSTAINABLE STRATEGY FOR RESILIENT FOOD SYSTEMS

Presented at the 1ST Agroecology Conference in Zambia

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Introduction

- 2015 Sustainable Development Goals (SDGs) Adopted (GLOBAL ISSUES)
- SDG2 – end hunger, achieve food security and improved nutrition, and promote sustainable agriculture by 2030
  - strong interconnectivity. Hunger and malnutrition are linked to issues of equity, justice and employment, along with environmental sustainability thus requiring a holistic approach
- Agroecology can deliver this SDG2. is an approach that takes into account natural ecosystem, uses local knowledge to plant a diversity of crops that boost the sustainability of the farming systems

ISSUES

- By 2050, the world needs 60% more food (FAO)
- Farming is big now – mechanized, fertilizers, improved seed, hybrids, GMO, large fields on one crop monocropping – created may issues such as soil acidity, depleted soils,
- Climate Change – altering environments and creating havoc – eg Zambia's Drought
- Food security and nutrition will not be attained by 20230 with agriculture approach

Conference of Parties COP28 (30 Nov to 12 Dec 2023)

- International decision-making body on climate change
- Big annual UN meeting with many countries on Climate Crisis
- IPCC Intergovernmental Panel on Climate Change reported - world is in the Red Zone
- Risk of temperature rising above 1.5 degrees by 2040

COP 28 Results

- Temperature rising above 1.5 degrees even by 0.5 degree extra will lead to
- Irrevocable damage, more poverty, extreme heat, sea level rising and losing habitat, droughts, floods, fires
- COP 28 made decisions to help not to reach this level worldwide

COP 28 Outcomes

- Agreed to move away from fossil fuels (Diesel, petrol etc) in orderly manner
- Phase out fossil fuel subsidies that do not address energy poverty
- Triple renewable energy technologies and double energy efficiency by 2030
- Keep 1.5 C goal alive
- Loss and damage fund for developing countries that are most vulnerable to climate change – initially $1 Billion pledged
- ALTERRA – launched new climate investment fund hoping to reach $250 Billion by 2030

COP 28 Outcomes Cont

- Countries must protect themselves from effects of climate change around themes of food, nutrition, health, water, infrastructure, eradication of poverty, cultural heritage
- Over 150 countries endorsed declaration on sustainable agriculture, resilient food systems and climate action to transform agriculture and food systems

Organic farming and Agroecology

- Organic farming – no chemical pesticides, no chemical fertilizers, no GMO seeds, responsible use of energy and natural resources. Certification by Organic Body
- Agroecology resembles organic farming but goes further
- Whole ecosystem, acting in accordance with the natural cycle.
- **Principles support integrative thinking. All actors of the food system with potential to address climate change, transform food at local and national level, renewable energy services, actors from biodiversity, soil health, nutrition, energy are all included.**

AGROECOLOGY ELEMENTS

- FAO 10 elements in agroecology framework:
  - Diversity of species or ecological functions or knowledge held by actors
  - Co-creation and sharing knowledge practices, science, innovation
  - Synergies of positive interactions
  - Efficiency redesign food systems
  - Resilience – capacity of a system to self regulate and remain functional when facing pests, disease outbreaks, disturbance
  - Responsible governance – develop effective and innovative policies
  - Circular and solidarity economy – connect producers to consumers
  - Culture and food traditions
  - Human and social values
  - Recycling will sustain incomes of food producers. Markets - health

Agroecology potential realized

- Integrate agroecology into agricultural polices and programs – a more sustainable, equitable and resilient food system can be created
- Governments, research institutions, civil society organization must work together to promote agroecology through incentives, research funding, capacity building programs
- Investments at local, national and international levels

AGRICULTURE AND ENVIRONMENT POLICIES

- **The National Agriculture Policy NAP 2012 -20230 in line with the national economic vision 2030**
- Develop a competitive and diversified agricultural sector driven by equitable and sustainable agricultural development.
- Promote environmentally friendly farming systems such as conservation farming, afforestation, and the use of green manure and lime
- **2017 Zambia launched the National Climate Change Policy**
- To stem the impact of climate change and reduced economic growth due to crop failure and impact on energy production.
- Effective natural resource utilization, environmental conservation to eradicate poverty and improve the quality of life of the people of Zambia.

Sustainable Development Goals SDGs and Agroecology

- Agroecology will contribute directly to
  - Goal 1 – Eradicate poverty
  - Goal 2 - Zero hunger
  - Goal 3 – Good health
  - Goal 4 - quality education
  - Goal 5 - Achieve gender equality
  - Goal 6 - Increase water use efficiency
  - Goal 8 - decent and economic growth
  - Goal 9 - ensuring sustainable food consumption and production

What next

- Identify agroecology country initiatives
- Compile agroecology data base of practices, initiatives, climate smart agriculture techniques, agroecological farmers – share them
- Develop agroecology agriculture policies or include agroecology in existing agriculture policies
- Talk about agroecology everywhere you are

CONCLUSION

- The 1st Agroecology Conference is the first step in the right direction for agroecology
- Sharing of experiences, which will be compiled.
- Climate Change is here - Need to do our part in operationalizing and expanding Agroecology practices to safe guard Zambia and its people
- With data in hand on agroecology, lobby government for agroecology Policy inclusion
- I salute the Pelum for organizing this conference and everyone who responded

- Thank you. God bless you.