

UNIT THREE

Issues in Sustainable Development I: Management of Conflict over Resources

3.1. The Concept of Sustainable Development: Historical Overview

- The concept of “**Sustainable Development**” has emerged as a prominent development paradigms supported by international and national governmental and NGOs.
- The first **United Nations Conference on Environment and Development** (UNCED) held in **Stockholm, Sweden** in 1972. It is also known as **Stockholm conference**.

- During the conference, the notation of **“eco-development”**, which integrated development with environmental protection was introduced.
- The Stockholm conference also led to **the establishment of United Nation Environmental Programme(UNEP)**.
- The major mission of UNEP are:
 - ❖ To provide leadership in sustainable development
 - ❖ To improve quality of life without compromising future generation.
 - ❖ To inspire and enable nations to care for the environment
- UNEP became the leading **global environmental Authority** and the main UN body for environmental action.
- The conference also inspired several follow-up conferences and initiatives.

- The second UNCED held in **Nairobi, Kenya in 1987** introduced **the idea of “sustainable development”**.
- The third conference held in **Rio de Janeiro, Brazil in 1992**. It also known as the **“Earth Summit”**, which further expanded the concept and led to the development of **“Agenda 21”**.
- Agenda 21 emphasized **the link between poverty, environmental protection and natural resource management**.
- Agenda 21 states in its Principle 1 that **“human beings, the centre of concern for sustainable development, are entitled to a healthy and productive life in harmony with nature”**.

- The fourth conference known as the **“World Summit on Sustainable Development”** was held in **Johannesburg, South Africa in 2002**. This summit placed much more emphasis on the **social and economic aspects of sustainable development**.

Definition of sustainable development

- While definitions of sustainable development vary, it generally refers to **“a development path that maintain or enhance total welfare overtime”**.
- It encompasses environmental quality, social equity and other factors contributing the quality of life.

- **Sustainability** implies that future growth and overall quality of life are critically dependent on the quality of the environment.
- The goal of sustainable development is **to meet human needs while preserving natural resource, ensuring intergeneration equity**.
- Sustainable development as a concept puts **the relationship between economic growth and the environment at its core**.
- The term **sustainable development** was first used in **1987** by the **World Commission on Environment and Development**. It is also known as “**Brundtland Commission Report**” or “**Our common future**”.

- Brundtland report was named after its chairperson, **Gro Harlem Brundtland**, former prime minister of Norway.
- According to the World Commission of Environment and Development(1987):
 - “sustainable development is development that meet the need of the present without compromising the ability of the future generation to meet their own needs”.

Pillars(Components) of sustainable development

- The three interdependent and mutually reinforcing pillars of sustainable development: **economic development, social development, and environmental sustainability.**

- Sustainable development, therefore, aims to bring the three components together in a balanced way, as three interconnected or nested rings.
- The nested rings approach insists that the **economy is dependent on society and the environment**. Human and economic activities take place within the environment and the society, depend on and have an impact on the environment.
- A key challenges for sustainable development is, therefore, the **integration of different dimensions of sustainability**, taking a holistic view and overcoming barriers between disciplines, ideologies and sectors.

- **Sustainable development has three essential dimensions: economic, environmental and social.**
 - ❖ **Economic**: economic sustainability requires continuous production, manageable debt and balanced sectors.
 - ❖ **Environmental**: environmental sustainability requires stable resource, conservation of non- renewable system, and protection of biodiversity and ecosystem.
 - ❖ **Social**: social sustainability requires fairness in distribution and opportunity among all persons with adequate provision of social service and governance for all people.
- **As the environment, society and economy become more aligned, human wellbeing will be preserved and improved the quality of life.**

The Sustainable Development Goals (SDGs)

- The Sustainable Development Goals (SDGs), also known as the **Global Goals**.
- Goals of sustainable development refers to **a set of objectives** established by the **United Nations in 2015**.
- These goals are designed to address various global challenges and promote sustainable development worldwide.
- The SDGs are **17 global goals** adopted by the UN in 2015 to end poverty, protect the planet and ensure peace and prosperity for all by 2030.

The 2030 SDG Agenda comprises 17 goals and 169 targets.

The 17 SDGs are:



1	No Poverty	10	Reduced Inequalities
2	Zero Hunger	11	Sustainable Cities and Communities
3	Good Health and Well-Being	12	Responsible Consumption and Production
4	Quality Education	13	Climate Action
5	Gender Equality	14	Life below Water
6	Clean Water and Sanitation	15	Life on Land
7	Affordable and Clean Energy	16	Peace, Justice and Strong Institutions
8	Decent Work and Economic Growth	17	Partnerships for the Goals
9	Industry, Innovation and Infrastructure		



- ❖ **1. No Poverty**: Eradicating extreme poverty and ensuring equal access to basic resources and services.
- ❖ **2. Zero Hunger**: Achieving food security, improving nutrition, and promoting sustainable agriculture.
- ❖ **3. Good Health and Well-being**: Ensuring healthy lives, access to healthcare, and addressing major health issues.
- ❖ **4. Quality Education**: Providing inclusive and equitable education for all, promoting lifelong learning opportunities.
- ❖ **5. Gender Equality**: Achieving gender equality and empowering women and girls in all sectors of society.

- ❖ **6. Clean Water and Sanitation**: Ensuring access to clean water, proper sanitation, and efficient water resource management.
- ❖ **7. Affordable and Clean Energy**: Promoting the use of renewable energy sources and enhancing energy efficiency.
- ❖ **8. Decent Work and Economic Growth**: Ensuring inclusive and sustainable economic growth, promoting productive employment, and decent work for all.
- ❖ **9. Industry, Innovation, and Infrastructure**: Developing resilient and sustainable infrastructure, promoting inclusive and sustainable industrialization.
- ❖ **10. Reduced Inequalities**: Reducing inequality within and among countries, promoting social inclusion and equal opportunities.

- ❖ **11. Sustainable Cities and Communities**: Making cities and human settlements inclusive, safe, resilient, and sustainable.
- ❖ **12. Responsible Consumption and Production**: Promoting sustainable consumption and production patterns, promoting sustainable management of natural resources.
- ❖ **13. Climate Action**: Combating climate change and its impacts through mitigation and adaptation measures.
- ❖ **14. Life Below Water**: Conserving and sustainably using marine resources, protecting marine ecosystems.
- ❖ **15. Life on Land**: Protecting, restoring, and promoting sustainable use of terrestrial ecosystems, combating desertification, halting biodiversity loss.

❖ **16. Peace, Justice, and Strong Institutions**: Promoting just, peaceful, and inclusive societies, ensuring access to justice and accountable institutions.

❖ **17. Partnerships for the Goals**: Strengthening global partnerships for sustainable development, mobilizing resources, and sharing knowledge.

➤ These goals provide a comprehensive framework for addressing interconnected global challenges and fostering sustainable development for present and future generations.

Integration of the SDGs in the Ethiopian National Development Frameworks

- The Ethiopian government recognizes the importance of integrating the Sustainable Development Goals (SDGs) into its national development frameworks.
- They believe that the SDGs can help them achieve their goals of eradicating poverty and bringing about prosperity for the Ethiopian people.
- To facilitate this, the SDGs have been integrated into the Growth and Transportation Plan II (GTP II-2015/16-2019/20) by aligning them with the main directions of the GTP II.

- **The main focus areas of the GTP II include creating good conditions for macroeconomic stability, promoting fast and sustained economic development, investing in infrastructure, developing human resources and technological capacity, promoting good governance and democratic systems, and fostering environmental development.**
- **Existing institutional forms and mechanisms have been utilized to implement the SDGs and GTP II.**
- **The implementation of the SDGs has also played a role in accelerating economic development in terms of infrastructure development.**

- Integrated with GTP II, **SDGs implementation in Ethiopia began in the 2015/16 fiscal year**, and progress have been registered. This was made possible through:
 1. Ensuring universal access to quality education (SDG 4),
 2. Promoting sustainable management of water and sanitation (SDG 6), and
 3. Ensuring access to affordable & reliable energy for all (SDG 7).
- Furthermore, significant progress has been made in **improving health and well-being**. Ethiopia has seen:
 - ❖ a reduction in infant and maternal mortality rates,
 - ❖ a significant increase in life expectancy, and
 - ❖ a reduction in HIV and malaria deaths.

- Overall, the Ethiopian government is committed to integrating the SDGs into its national development frameworks and has already made significant progress in various areas, including **education, water and sanitation, energy, and health.**

Performance of SDGs

- The performance of SDGs in the Federal Democratic Republic of Ethiopia(FDRE) has been **focused on eradicating poverty and implementing development interventions that meet the needs of the nation while ensuring inter-generation equity.**

- **Therefore, the country has implemented:**
 - ❖ **Climate-Change-Resilient Green-Economy(CRGE) strategy.**
 - ❖ **The Paris Agreement on climate change.**
 - ❖ **National Policy and strategy on disaster prevention and management.**
- **To achieve the 2030 SDGs, national development priorities have been identified in the GTP II from 2015-2020.**
- **The GTP plan was also integrated into the homegrown economic reform after governance reforms in 2018.**

➤ The new 10 years development plan of 2021-2030 is also considering the SDGs pillar. These include:

- ❖ I. Ensuring that the **agricultural development**.
- ❖ II. Transforming the **manufacturing industry development**;
- ❖ III. Enhancing the **economy** to its full economic capacity:
- ❖ IV. Balancing the overall **demand and supply**;
- ❖ V. Developing the **construction industry**
- ❖ VI. Developing **urban administration and management**
- ❖ VII. Supporting **domestic investors**;
- ❖ VIII. Providing support to **human resources development**
- ❖ IX. Building **climate resilient green economy**
- ❖ X. Eliminating **rent-seeking behaviors**.

Shortcoming of the notion(concept) of Sustainable Development

- The concept of sustainable development has faced several criticism and shortcomings. Let's summarize them below:
 - ❖ **Incorrect terminology:** critics argue that the term "sustainable dev.t" is naturally contradictory.
 - ❖ **Narrow focus:** Sustainable dev.t often only associated with environmental issues, neglecting other critical aspects.
 - ❖ **Lack of consensus or clarity:** lack of single universally accepted definition of sustainable development, which lead to implementation difficulties.
 - ❖ **Diverse interpretation:** different worldviews, cultural backgrounds and political ideologies results in diverse interpretation of sustainable dev.t goals.

- ❖ **Unequal distribution of benefit:** Some critics argue that the concept of sustainable dev.t might only benefit certain regions or groups while neglecting the need and aspiration of all people.
- ❖ **Controversial methods:** the application of sustainable dev.t has been met with ambiguity regarding the effectiveness of certain approaches.
- ❖ **Implementation challenges:** Inadequate funding, lack of political will, and weak institutional capacity can hinder the implementation of sustainable development initiatives.
- ❖ **Limited focus on cultural aspects:** Sustainable development tends to focus predominantly on economic, social, and environmental dimensions while giving relatively less attention to cultural aspects.

Choose the Best Answer from the Given Alternatives

1. Which conference introduced the idea of “sustainable development”? **Q1**

A. Stockholm conference

B. Nairobi conference

C. Rio de Janeiro conference

D. Johannesburg conference

1. How many Sustainable Development Goals(SDGs) are there in the 2030 agenda? **Q2**

A. 10

B. 17

C. 20

D. 25

1. When and where was the first United Nations Conference on Environment and Development (UNCED) held? Q3

- A. 1972, Rio de Janeiro, Brazil C. 1992, Stockholm, Sweden**
B. 1987, Nairobi, Kenya D. 1972, Nairobi, Kenya

1. What is the main point of Agenda 21? Q4

- A. To encourage partnership in caring for the environment**
B. To define the term "sustainable development"
C. To highlight the link between poverty, underdevelopment, and environmental protection
D. To place emphasis on the economic aspects of sustainable development

1. Which UNCED conference emphasized the social and economic aspects of sustainable development? Q5

A. 1972 Stockholm Conference C. 1992 Rio Summit

B. 1987 Nairobi Conference D. 2002 Johannesburg Summit

2. According to one definition, a development path is sustainable if: Q6

A. Total consumption continues to increase

B. Total welfare does not decline over time

C. All environmental regulations are strictly enforced

D. The government invests heavily in renewable energy

1. Which three pillars are considered to be interdependent and mutually reinforcing in sustainable development? Q8

A. Economic, environmental, and political

B. Economic, social, and environmental

C. Economic, technological, and cultural

D. Environmental, social, and technological

2. Which Ethiopian development plan integrates the SDGs? Q9

A. GTP I

B. GTP II

C. GTP III

D. GTP IV

1. The nested rings approach to sustainable development suggests that: Q10

A. The environment is independent of both society and the economy

B. The economy is dependent on both society and the environment..

C. Society is independent of both the environment and the economy

D. All three dimensions of sustainability are equally important

- 1. An economically sustainable system is one that: Q11**
 - A. Maximizes short-term profits for businesses**
 - B. Produces goods and services sustainably over time**
 - C. Relies heavily on government subsidies**
 - D. Focuses on rapid economic growth at any cost**
- 2. A key challenge for sustainable development is: Q12**
 - A. Accurately measuring the success of different initiatives**
 - B. Obtaining funding from international organizations**
 - C. Integrating the different dimensions of sustainability..**
 - D. Convincing everyone of the importance of environmental protection**

1. What is the Brundtland Commission's definition of sustainable development? Q13

- A. Development that meets the needs of the present and future generations**
- B. Development that promotes economic growth without harming the environment**
- C. Development that ensures equal distribution of wealth and resources**
- D. Development that prioritizes the preservation of biodiversity**

1. Imagine you are a leader creating a development plan for your community. Which SDG is most relevant to address the issue of food insecurity? Q14

A. SDG 1: No Poverty

C. SDG 2: Zero Hunger,

B. SDG 5: Quality education

D. SDG 4: Gender equality

2. Why might promoting gender equality (SDG 5) be beneficial for achieving other SDGs? Q15

A. It can lead to increased economic participation

B. It can improve access to education and healthcare,

C. It can empower women to make decisions about their families' well-being

D. All of the above

1. The economic dimension of sustainable development emphasized on **Q16**

A. Produce goods and services on a continuous basis

B. Government adequate provision of social services

C. Avoiding overexploitation of non-renewable resources

D. Maintenance of biodiversity and ecosystem

2. Which one of the following is NOT the 2030 Sustainable Development Goals of agenda? **Q17**

A. Quality education

C. Zero hunger

B. Life below water

D. Injustice and inequalities

1. What was the main reason for integrating the SDGs into Ethiopia's Growth and Transportation Plan II (GTP II)?

Q18

- A. To fulfill Ethiopia's aspirations for poverty eradication and prosperity.**
- B. To obtain financial aid from international organizations.**
- C. To comply with international environmental regulations.**
- D. To improve the country's ranking in global development indices.**

1. Which SDG has seen significant progress in Ethiopia through initiatives like ensuring universal access to education and reducing infant mortality? Q19

A. SDG 1: No Poverty

B. SDG 4: Quality Education

C. SDG 3: Good Health and Well-Being

D. SDG 6: Clean Water and Sanitation

1. Which one of the following national policies implemented by Ethiopia to align with the SDGs and address climate change? Q20

- A. National Policy on Gender Equality and Women's Empowerment**
- B. Climate-Change-Resilient Green-Economy strategy (CRGE)**
- C. National Youth Employment Program**
- D. Rural Development and Food Security Initiative**

1. Which one of the following is the main aim of the concept of sustainable development? Q21

A. Environmentalization of all major human activities

B. Poverty reduction and economic growth while, considering environmental sustainability

C. Implementation of green technologies

D. creation of a balanced and just world design

2. Sustainable Development Goals are developed to be achieved by Q22

A. 2015-2025 AD

C. 2000-2015 AD

B. 2015-2030 AD

D. 2010-2025 AD

1. Which one of the following is the major outcomes of the 1972 Stockholm conference? Q23

A. The establishment of United Nation Environment Programme(UNEP)

B. The establishment of United Nation Education, Social and Cultural Organization(UNESCO)

C. The establishment of Millennium Development Goals(MDGs)

D. The introduction of Sustainable Development Goals(SDGs)

1. What is the name of the document that was developed at the earth Summit in 1992, which emphasized the link poverty, environmental protection and natural resource management? Q24

A. Kyoto Protocol

C. MDGs

B. Agenda 21

D. Paris Agreement

2. Which Sustainable Development Goals focuses on achieving food security and promoting sustainable agriculture? Q25

A. Responsible consumption and production

B. Zero Hunger

C. Gender equality

D. Affordable & clean energy

1. Which one of the following is the criticism of the notion of sustainable development? Q26

A. The absence of a single concept and implementation difficulties.

B. Benefit only a certain part of humanity

C. controversial methods and internal contradiction

D. All of the above

2. Which one of the ff. is NOT a fund resource? Q27

A. Metallic minerals

C. Coal and petroleum

B. Biotic resources

D. Ferrous minerals

1. According to Agenda 21, what is the center of concern for sustainable development? Q28

- A. Environmental protection C. Social and economic aspect**
B. Poverty and underdevelopment D. Human being

1. Which one of the following is the mission of the United Nation Environment programme(UNEP)? Q29

- A. To provide leadership in sustainable development**
B. To improve the quality of life for the future generations
C. To inspire and enable nations to care for the environment
D. All of the above

1. Which of the following is NOT a main focus area of the Ethiopian government's Growth and Transportation Plan II (GTP II)? Q30

A. Creating conditions for macroeconomic stability

B. Promoting fast and sustained economic development

C. Investing in infrastructure

D. Fostering environmental degradation.

1. In which fiscal year did the implementation of the SDGs in Ethiopia begin? Q31

A. 2012/13

C. 2014/15

B. 2013/14

D. 2015/16

1. Which of the following is NOT a noteworthy achievement in the implementation of the SDGs in Ethiopia? Q32

- A. Universal access to quality education**
- B. Sustainable management of water and sanitation**
- C. Access to affordable and reliable energy for all**
- D. Improving health and well-being**

1. One of the ff. is the impact of implementing the SDGs on economic development in Ethiopia? Q33

- A. Slowed down economic growth**
- B. Accelerated economic development**
- C. No significant impact**
- D. Increased inflation rates**

1. Which of the following has NOT been achieved in terms of improving health and well-being in Ethiopia? Q34

A. Reduction in infant and maternal mortality rates

B. Increase in life expectancy

C. Reduction in HIV and malaria deaths

D. Universal healthcare coverage

1. Which of the following is the goal number 8 of sustainable development goal? Q35

A. Clean water & sanitation

C. No poverty

B. Decent work & economic growth

D. No hunger

- 1. Which of the following best represents the social pillar of sustainable development? Q36**
- A. Promoting gender equality and social justice**
 - B. Maximizing profits for businesses**
 - C. Exploiting natural resources without regard for the environment**
 - D. Increasing economic growth at all costs**
- 2. Agenda 21 was the outcome of which conference? Q37**
- A. Earth summit 1992**
 - B. World summit 2002**
 - C. Stockholm conference 1972**
 - D. Brundtland Report 1987**

1. Sustainable development seeks to achieve a balance between: Q38

A. Social, economic, and cultural aspects

B. Economic growth, social justice, and environmental protection

C. Environmental degradation and economic prosperity

D. Poverty eradication and profit maximization for businesses

1. Where was the sustainable development explained for the first time? Q39

A. World development report

B. Brundtland commission report

C. First earth summit report

D. Human development report

2. The SDGs are set in 2015 by United Nation are intended to achieved by? Q40

A. 2025

B. 2020

C. 2030

D. 2040

3.2. Resource use policies and related conflicts

Meanings and Types of Resources

- Resource refers to any element or substance of the environment that is useful for the satisfaction(fulfilling) of human needs.
- There are **two main categories of natural resource** based on **their capacity for generation**.
 - i. Renewable resources**
 - ii. Non- renewable resources**
- **Renewable resources:** are resources that are recurrent, meaning they can replenish themselves in the foreseeable or expected future.

- They are also known as **flow or inexhaustible resources**.
- Renewable resources are **replaceable in character**, because they regenerate themselves through reproduction or recycling.
- Renewable resources comprise both living or biotic resources (e.g., animals and plant) and non-living or abiotic resources (e.g., solar energy, land, soil, water and air).
- **Non-Renewable Resources**; are resources that do not replace or regenerate by natural processes.
- They are also referred to as **fixed/finite/exhaustible/fund resources**.

- **Non- renewable resources are depleted over time and once used up, they are gone forever.**
- **This category consists of most mineral resources, such as coal, petroleum, Natural gas, Ferrous and Nonferrous metals, etc.**

Categories of resource conflicts

- **Resource conflicts can be categorized based on the primary resource involved and the main driver of the conflict.**
- **These categories typically include extractive resources (e.g., hydrocarbons, minerals, gemstones, and timber), land, and water.**

- It is important to note that many conflict involve multiple types of resource.
- Additionally, the majority of resource conflicts can be attributed to one or more of the following drivers:
 - **1. Conflict over resource ownership**: This type of conflict arises when different individuals or groups claim ownership rights over a particular resource.
 - **2. Conflict over resource access**: This type of conflict arises from different parties seeking access to the same resource. It can occur when there is high demand and limited supply, leading to competition and potential disputes over who gets to utilize the resource.

- **3. Conflict over decision making associated with resource management:** This category of conflict emerges when there are disagreements regarding how the resource should be managed and utilized.
- **4. Conflict over distribution of resource revenues and benefits:** In some cases, conflicts revolve around the unequal distribution of financial gains and other advantages associated with resource extraction or utilization.
- Overall, resource conflicts are **complex and multifaceted**, often involving a combination of these drivers. Understanding these categories **can help in analyzing and addressing the root causes of such conflicts for more sustainable resource management.**

Unique characteristics of natural resource conflicts

- Natural resource conflicts are characterized by several unique features.
- **Resource scarcity or abundance of a particular resource:** availability of resource significantly impacts conflict dynamics and resolution options.
- **Complex interplay of factors:** natural and social factors create uncertainty in the availability, quality and value of resources.
- **Geographical patterns of resource distribution:** also play a significant role in natural resource conflicts. Conflict often follow ethnic, religious or linguistic lines due to uneven resource distribution and seasonal resource fluctuation.

- **Diverse actors and stakeholders:** The involvement of various actors and stakeholders (such as nation-states, local gov.t, civil society, etc.,) can influence natural resource dynamics and conflicts dynamics.
- This diverse range of actors introduced different perspectives, interests and power dynamics into the resolution process.
- **Economic and political significance:** natural resource often hold significant economic and political importance, creating power imbalance and benefiting elite (leading) actors.
- **Power disparities between parties:** Power imbalance between international corporations versus local communities and the exclusion of certain group from decision making processes are common in resource conflicts.

- Natural resources are often **governed by multiple or hybrid institutions(customary and statutory)**, which can add to the complexity of resolving conflicts.

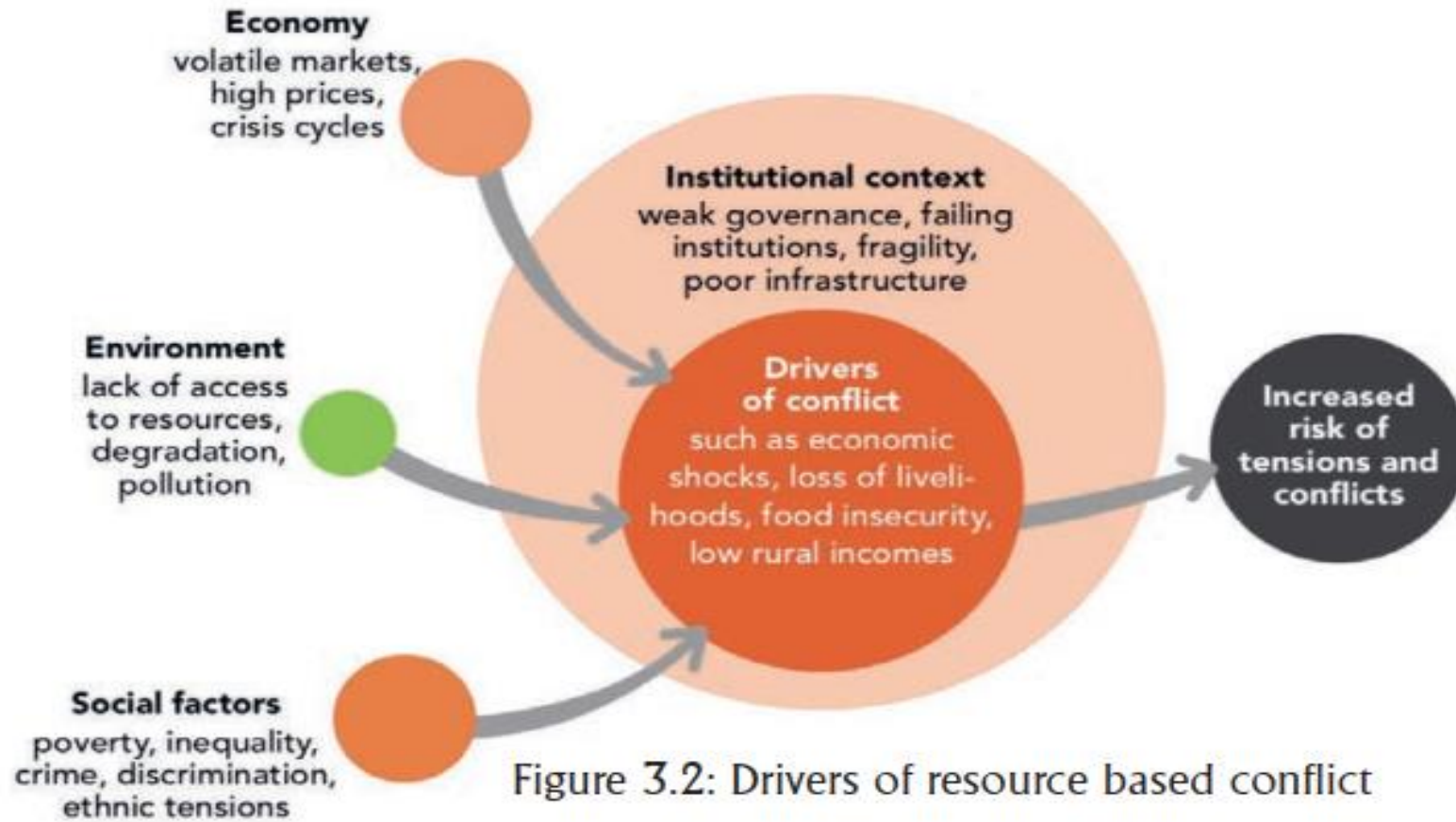


Figure 3.2: Drivers of resource based conflict

Conflict over resources

- Conflict over renewable resource are **political issues about access, control and decision-making** regarding resource.
- Political struggle become sources of **tension and division**, based on the competing interests of different individuals, groups or countries.
- These conflicts can occur at various levels(at local, national, and international level) and involve diverse actors or stakeholders, such as communities, private sectors, corporations, NGOs and government.
- However, **conflicts are not in themselves a negative phenomenon**. They can be an essential component of **change and development**.

- ❖ Conflicts can be promoters for change and development if resolving conflicts through peaceful means. This can be achieved when the involved parties have trust in governing institution.
- ❖ But conflict can also escalate(intensify) into violence when failure to manage conflict peacefully. Weak institutions, fragility political system and social divisions, can also lead to violence.
- There are three main drivers of resource conflicts. These drivers, working alone or in combination. These are:

- ❖ 1. Competition over scarce renewable resources;
- ❖ 2. Poor governance of natural resources and the environment;
- ❖ 3. Transboundary natural resource dynamics and pressures.

1. Competition over increasingly scarce renewable resources

- The concept of “resource scarcity” refers to insufficient renewable resources(water, forest, land) to meet local demand or needs.
- increased scarcity of renewable resources can lead to competition between user groups or sectors with impacts on livelihoods.

- **There are three main causes of scarcity.**
 - ✓ **Demand- induced scarcity**
 - ✓ **Supply – induced scarcity**
 - ✓ **Structural scarcity**
- **Demand-induced scarcity:** occurs when the demand for a specific renewable resource exceeds the available supply due to population growth and increase consumption rate.
- **Supply-induced scarcity:** occurs when environmental degradation, natural variation & a breakdown in delivery infrastructure reduces the total supply of specific resource.
- **Structural scarcity:** occurs when different groups in a society face unequal resource access like water, land and forests, due to poor governance, cultural practices and economic barriers.

➤ Causes of structural scarcity are:

- ✓ **Poor Natural Resource Management(NRM)**
- ✓ **Land use decision and trade-offs:** Prioritizing certain land use(e.g., agriculture, development).
- ✓ **Cultural practices:** restrict access to resource for certain groups, such as women or marginalized communities.
- ✓ **Social and economic barriers:** poverty, lack of education and limited property rights can prevent individuals utilizing resource effectively.
- ✓ **Poverty:** can also exacerbate resource scarcity, as it can prevent individuals from purchasing necessary equipment to access and exploit natural resources.

2. Poor governance of renewable natural resources and the environment:

- Governance of renewable natural resources and the environment refers to the institutions, policies and processes that are established to regulate their management, ownership, allocation, use and protection.
- The way we manage and govern renewable resources play a crucial role in maintain peace and stability.
- When governance falls, it can lead to conflict, inequalities and environmental degradation.
- There are four types of poor governance that lead to poor resource and environmental management.

I. Unclear Resource Rights and Laws

- In many countries, there are various form of tenure, including formal (statuary), informal (customary and religious), that regulate land and renewable resources. Disagreement and uncertainties over this rules of lead to conflict.
- **The lack of state capacity to enforce laws and resolve disputes in rural areas** is also a key factor in poor natural resource management.
- Unclear or overlapping enforcement of resource rights and laws create a fertile ground for conflict.

II. Discriminatory policies and marginalization

- **Discriminatory policies contribute to structural scarcity, where certain groups face systematic barriers to resource access and livelihood opportunities.**
- **Discriminatory policies that limit access to resources for specific groups are a significant driver of conflict and intensify existing inequalities.**

III. Unequal benefit and burdens from dev.t project

- **Unequal benefit and burdens from development projects can create tensions if communities are not compensated from the damage and do not receive a share of the development benefits, financial or otherwise.**

IV. Lack of public participation and transparency in decision making

- Often, government and private corporation make resource management decision **without meaningful involvement of affected communities and stakeholders**, this leading to opposition and conflict.
- Absence of transparency results in the community not understanding the rational behind decisions, leading to a lack of trust and a negative perception.
- Building trust and inclusivity requires open communication and addressing community concern.

3. Transboundary natural resource dynamics and pressures

- Transboundary natural resource dynamic and pressures refers to the challenges and conflict arise when managing renewable natural resources that span across national borders.
- This include resource like water, wildlife, fisheries and air quality. These resource can be affected by waste management, pollution, climate change and disasters, which often have transboundary impact.
- Based on UN Charter and the principles of international law **countries have the right to utilize their resources** in line with their own environmental and developmental policies, but with two major requirements: **No harm to others** and **sharing and cooperation**(principle 2 of Rio declaration).

- There are **four main types of transboundary** dynamics and pressures that can cause conflicts over renewable natural resources.
- ✓ **Unequal consumption of shared resources:** conflicts arises when one country uses of shared resources (water or fisheries) significantly more than others, violating agreements or ignoring natural fluctuations.
 - ✓ **Cross border environmental impacts:** Activities in one country (infrastructure, industry, land use) can negatively impact resources (water, air & wildlife) in another, causing pollution, degradation, and natural disasters.

- ✓ **Migration patterns of pastoralists and wildlife population across national borders:** can lead to conflict and competition over resource impacting livelihood and indigenous communities.
- ✓ **Illegal(illicit) activities:** Illegal and criminal groups operating globally can deplete natural resource and creating conflict, depriving local communities of benefit.
- Cooperative interactions over shared water resource have generally been more common than conflicts.
- At present, **there are 263 international rivers** that either cross, or demarcate, international boundaries.
- Studies show that the past 50 years, **cooperative interactions have been more than twice as common as conflictive interactions** (water-related conflicts are rare compared to cooperative agreements i.e., 295 agreements vs. 37 conflicts).

- Only 37 incident water conflicts since 1948, compared to 295 water agreement.
- Examples of successful cooperation:
 - ✓ Iran and Iraq resolve tensions over Mesopotamian marshlands;
 - ✓ Iran and Afghanistan - co-managing Sistan basin degradation;
 - ✓ Sudan and South Sudan to facilitate coordinated management
 - ✓ Palestinian-Israeli to address water and waste management issues.

The Nile Basin

- Transboundary water management in the Nile Basin is a sensitive diplomatic issues due to **unequal water share between upstream and downstream countries.**

- **The Nile Basin Initiative (NBI)**, established in 1999, aims to coordinate the management, peace and security, among the ten river basin states.
- The NBI is the first initiative to include the participation of eleven basin states. **Upstream countries usually requesting:**
 - ✓ Equitable water share agreement
 - ✓ Sustainable food production through water usage
 - ✓ Hydropower development
 - ✓ Collaborative soil and water conservation
- In 2010, five of the upstream states signed the **“Nile River Basin Cooperative Framework”** to utilize an equitable share of water from the basin, but Egypt and Sudan strongly opposed it.

- **International law commission (ILCs) article emphasizes:**
 - ❖ **Article 5:** Equitable and reasonable water usage.
 - ❖ **Article 7:** No significant harm to other basin states.
 - ❖ **Article 8:** Obligation to cooperate.
 - ❖ **Article 9:** Data and information exchange between upstream and downstream states.
 - ❖ **Article 20:** Protection and preservation of the ecosystem.

Conflict Prevention Strategies

- **Conflict prevention are a set of approaches, methods and mechanisms used to prevent conflicts from escalating into violence.**

- Preventing conflict over natural resources requires responses on multiple level, including technical, political and institutional responses.
- There is no “quick fix” to the problem: Addressing NRM challenges requires holistic solutions, not isolated technical fix.
- The major conflict prevention strategies for conflict over natural resource includes:

1. Cooperation and negotiation

- Encouraging dialogue, cooperation and exchange of data and information between conflicting parties, especially upstream and downstream state in the case of international watercourse. This can help achieve equitable and reasonable utilization of resource and prevent conflicts.

2. Legal framework and International law

- Implementing and enforcing legal framework such as international water law, that **promote equitable sharing of resource, protection of ecosystem and prevention of significant harm**. This can provide a basis for resolving conflicts and established clear guidelines for resource use.

3. The sustainable livelihoods framework

- The sustainable livelihoods framework is a tool used by various UN agencies and donors to address poverty reduction at the household level.

- **Applying sustainable livelihood framework to understand the impact of resource availability on livelihood and identify coping mechanism and institutions.**
- **The framework recognizes the agency of individuals to adapt and cope with shocks.**
- **The sustainable livelihoods approach does not offer a simple solution to the challenge of declining resource access and availability, but rather a powerful tool for understanding and tackling the challenges of resource scarcity**

- **Five basic approaches to increase livelihood opportunities and reduce vulnerability to resource scarcity.**
- 1. Livelihood diversification:** aims to make livelihoods more diverse and less dependent on a single scarce resource.
 - 2. Efficiency and value addition:** Add value to resources through processing and manufacturing.
 - 3. Livelihood adaptation:** aims to adjust livelihood to the impact of climate change.
 - 4. Protection of livelihood assets:** Prevent erosion of assets like natural capital, by providing support to food security, income, etc.
 - 5. Emergency livelihood support,** which aims to provide life-saving interventions, such as food, water, sanitation, and healthcare, when livelihoods fail.

3.3. Governance of Natural Resources

- The governance of natural resources refers to **how power and responsibilities over natural resources are exercised, how decisions are made, and how different groups, including indigenous peoples and local communities participate in and benefit from their management.**
- The governance of natural resources is becoming increasingly important **because of the exploitation and over use of natural resource have led to environmental degradation and destruction of livelihoods.**
- Improving natural resource governance can benefit both people and biodiversity through **improved ecosystem health and human well-being.**

- indigenous communities are particularly affected by exploitation of resources and their self determination and tenure rights are central to natural resource governance. However, many countries do not sufficiently recognize these rights.
- International conventions, such as UN Declaration on the Rights of Indigenous Peoples(UNDRIP) and Convention on Biological Diversity(CBD), recognize that indigenous rights and the preservation of traditional knowledge is crucial to conservation and biological diversity.
- Natural resource governance to promote environmental sustainability and bottom-up consensus-oriented decision making among multiple stakeholders.

Principle of Good Natural Resource Governance

- **Good natural resource governance is essential for sustainable development and can be achieved through robust laws, institutions, policies, and processes.**
- **However, there are several governance challenges that can lead to conflict over natural resources, such as**
 - 1. Unclear resource rights and law**
 - 2. Discriminatory resource policies, right and law**
 - 3. Unequal distribution of benefit and burdens**
 - 4. Lack of public participation and transparency in decision making**

➤ **Improving natural resource governance and prevent conflict requires five key interventions or principles:**

- 1. Clarifying resource rights and laws**
- 2. Ensuring equitable resource access**
- 3. Conduct environmental and social impact assessment**
- 4. Increase public participation**
- 5. Addressing unexpected impacts on renewable resources.**

3.4. Indigenous Conflict Resolution Practices

➤ **Indigenous conflict resolution practices are widely used in Ethiopia, particularly in rural and village communities where access to formal legal system is limited or formal legal systems can be costly and inaccessible.**

- These practices are deeply rooted in the culture and traditions of different ethnic groups and based on **community customs and familial relationships**.
- Indigenous conflict resolution mechanisms vary among ethnic groups and are not uniform across the country.
- Specific examples of indigenous conflict resolution mechanisms in Ethiopia include:
 - ❖ The **Gadaa system** among the Oromo,
 - ❖ The **Shimagle system** among the Amhara, and
 - ❖ The **Mada'a system** among the Afar.
 - ❖ The **T'eer** among the Somali

- These mechanisms often involve elders and clan leaders and are guided by unwritten laws passed down orally from generation to generations.
- Elders and clan leaders play crucial role in mediating conflicts. For example,
 - ✓ **Somali: Guurti elders** act as a judge and decisions makers
 - ✓ **Afar: Mada'a council** manage inter-clan conflict based on customary law
 - ✓ **Oromo: Gumma** techniques helps avoid revenge after unintentional killings

➤ The pastoralist community in Ethiopia including the **Somali, Borena,** and **Afar** pastoralists, have their own indigenous institutions led by **Ogaz, Abbaa Gadaa,** and **Kedo Abba,** respectively. These communities have two types of laws:

1. **Intra-ethnic group dispute**(resolving disputes within their own ethnic group).
2. **Inter-ethnic group disputes**(resolving disputes between different ethnic group).

➤ Indigenous conflict resolution in Ethiopia **aims for reconciliation and peaceful coexistence and win-win solution,** taking into account the interest of all parties involved.

- Whereas the formal legal system focuses on **imposing justice through fixed laws and agreements.**
- Indigenous conflict resolution mechanisms are also viewed as **an alternative to the formal legal system in achieving sustainable peace, particularly in pastoral areas.**
- **Benefits:**
 - ✓ **Win-win solutions:** Accounts for everyone's interests.
 - ✓ **Reconciliation and coexistence:** Promotes lasting peace.
 - ✓ **Accessibility and efficiency:** Reaches rural communities effectively.
- **Challenges:**
 - ✓ **Formal system gap:** Seen as an alternative, not integrated.
 - ✓ **Lack of uniformity:** Varies across ethnic groups and regions.
 - ✓ **Potential bias:** Concerns about fairness and transparency.

- Indigenous conflict resolution plays a crucial role in Ethiopian society, **offering accessible and culturally appropriate solutions**. However, integrating it with the formal legal system and addressing concerns about bias are crucial for long-term effectiveness.

The UN Declaration on the Rights of Indigenous Peoples

- Adopted in 2007, addresses the rights of indigenous peoples to land, self-determination, and peaceful resolution of conflicts.
- It recognizes their **collective right to live in freedom, peace, & security without facing violence**(Article 7)

- **The Declaration emphasizes the need for states to consult and involve indigenous peoples in decision-making processes regarding the use of their lands, especially in military activities(Article 30).**
- **It also highlights the rights of indigenous peoples to determine and prioritize the development and use of their lands and resources(Article 32).**
- **The Declaration asserts that indigenous peoples have the right to access fair and just procedures for resolving conflicts and disputes(Article 40).**

Choose the Best Answer from the given alternatives

1. Which of the following is NOT characteristic of renewable resources? Q1

- A. They can regenerate through reproduction or recycling**
- B. They have a high rate of regeneration**
- C. They are limited in supply and do not naturally replenish**
- D. They are primarily composed of living organisms**

2. What is another term for non-renewable resources? Q2

- | | |
|-------------------------------|-----------------------------------|
| A. Flow resources | C. Biotic resources |
| B. Renewable resources | D. Fixed or fund resources |

1. Which one of the following is examples of biotic renewable resources? Q3

A. Coal and petroleum

C. Solar energy and water

B. Animals and plants

D. Ferrous and nonferrous metals

1. Resource disputes often involve uneven geographic distribution, which can be problematic when: Q4

A. Resources are concentrated in urban areas.

B. Different regions depend on different resources.

C. Resource distribution overlaps with ethnic or religious boundaries.

D. There are complex land ownership rights.

1. In complex situations, resource governance may involve:
Q5

- A. Only formal, state-based institutions.**
- B. Only customary practices and traditions.**
- C. A mix of formal and customary systems.**
- D. Informal agreements between private companies.**

1. Which of the following is NOT a typical driver of resource conflicts? **Q6**

- A. Conflict over resource ownership**
- B. Conflict over control of the media**
- C. Conflict over access to resources**
- D. Conflict over distribution of revenue and benefits**

1. Which type of scarcity occurs when population growth outstrips resource availability? Q7

- A. Demand-induced scarcity**
- B. Supply-induced scarcity**
- C. Structurally induced scarcity**
- D. Environmental scarcity**

1. Who strongly opposed the "Nile River Basin Cooperative Framework"? Q8

- A. Egypt and Sudan**
- B. Downstream countries**
- C. International law commission**
- D. Upstream countries**

1. Resource conflicts are typically categorized based on the primary resource involved. Which of the following is a typical resource category? Q9

A. Technology B. Labor C. Water D. Education

1. which one of the following unique characteristics can shape the dynamic of natural resource conflicts? Q10

A. Resource scarcity and abundance of a particular resource

B. The involvement of various actors and stakeholders

C. Geographical patterns of resource distribution

D. All of the above

1. Which one of the following is a type of scarcity that occur when different groups in a society face unequal resource access? **Q11**

A. Demand-induced scarcity

B. Supply-induced scarcity

C. Structural scarcity

D. Both structural and supply- induced scarcity

1. All are the causes of structural scarcity. **BUT ONE **Q12****

A. Poor NRM

C. Cultural practices

B. Equal access of resource

D. Poverty

1. Which one of the following is a type of scarcity that occur when the demand for a specific resource exceeds the available supply? **Q13**

A. Demand-induced scarcity

B. Supply-induced scarcity

C. Structural scarcity

D. Both structural and supply- induced scarcity

1. Which one of the following factors contribute to structural scarcity? **Q14**

A. Discriminatory policies

C. Demand scarcity

B. Supply scarcity

D. Equal access of resources

1. Which one of the following is NOT a factor that can contribute to conflict over the use and management of renewable natural resource? Q15

A. Unclear or overlapping resource rights and laws

B. Discriminatory policies that marginalized certain groups

C. Lack of public participation and transparency in decision making

D. Equal distribution of benefit and burdens from developmental project

1. Which one of the following a potential grievance that can arise from poor governance of renewable natural resources? **Q16**

A. Clear and transparent decision making processes

B. Adequate compensation for damage to resources

C. Lack of public participation and transparency in decision making

D. Equal distribution of benefit and burdens from developmental project

- 1. How does poor governance of renewable natural resources and the environment affect peace and stability? Q17**
- A. It enhances peace and stability by reducing competition and conflict over resources.**
 - B. It reduces peace and stability by increasing competition and conflict over resources.**
 - C. It has no effect on peace and stability as resources are abundant and accessible to all.**
 - D. It depends on the type and location of the resources and the level of governance.**

1. Which one of the following is a type of poor governance that leads to poor resource and environmental management? Q18

A. Unclear resource rights and laws

B. Public Participatory in decision-making

C. Transparent and accountable institutions

D. Equitable and inclusive access from development projects.

1. Which one of the following is the key factor in poor natural resource management in rural areas? Q19

A. The lack of state capacity to enforce laws and resolve disputes

B. The abundance of state capacity to enforce laws and resolve disputes

C. The presence of state capacity to enforce laws and resolve disputes

D. The irrelevance of state capacity to enforce laws and resolve disputes

1. Which one of the following is correct about cooperative interactions to conflictive interactions over shared water resources in the past 50 years? Q20

A. Cooperative interactions are rare.

B. Conflictive interactions are more common.

C. Cooperative interactions have been more than twice of conflictive interactions.

D. Equal occurrence of both types of interactions.

1. According to the UN Charter and international law principles, what are the two major requirements for countries utilizing their resources? Q21

A. Unlimited exploitation and development

B. No harm to others and sharing and cooperation

C. Isolationism and independence

D. Strict conservation without sharing

2. How many incidents of acute conflicts over water have been documented since 1948? Q22

A. 37

B. 158

C. 295

D. 106

1. Which one of the following is the main aim of cooperative interactions over shared water resources? Q23

A. Exploitation of water resources

B. Avoidance of any interaction

C. Resolving conflicts through negotiation and cooperation

D. Ignoring international agreements

2. Which countries have signed the "Nile Rive Basin Cooperative Framework" in 2010? Q24

A. Egypt and Sudan

C. Upstream countries

B. Downstream countries

D. Egypt and Ethiopia

1. A type of transboundary dynamics and pressures that can cause conflicts over renewable natural resources? Q25

A. Unequal consumption of shared resources

B. Collaborative soil and water conservation

C. Transparent and accountable use of resource

D. Equitable water shared agreement

2. Which one of the following countries are made successful cooperation in resolving tension over Mesopotamia marshlands? Q26

A. Ethiopia and Egypt

C. Palestine and Israel

B. Iran and Iraq

D. Turkey and Spain

1. Which of the following is example of demand-induced scarcity? Q27

- A. Environmental degradation reducing the supply of specific resource**
- B. Population growth increasing the demand for a specific resource**
- C. Different groups facing unequal resource access**
- D. Poor enforcement of resource right and laws**

1. Which one of the following is NOT the main purpose of the Nile Basin Initiative(NBI)? **Q28**

A. To coordinate the management of the Nile Basin

B. To promote peace and security among its member states

C. To promote balanced and fair utilization of the river between upstream and downstream countries

D. To facilitate the construction of hydroelectric power solely to downstream states

1. According to International Law Commission(ILCs), how should water course states utilized an international water course? **Q29**

A. Equitable and reasonable manner

B. To deplete the ecosystem of the international water course

C. With causing significant harm to other state

D. To ignore the exchange of data and information between the upstream and downstream states

1. Which of the following is NOT an approach to increase livelihood opportunities and reduce vulnerability to resource scarcity? Q30

A. Livelihood diversification

B. Improving the efficiency of resource dependent livelihoods

C. Enhancing conflict intensity

D. Livelihood adaptation programs

1. What interventions can be provided as part of emergency livelihood support? Q31

A. Market support and production support

B. Improving efficiency of resource-dependent livelihoods

C. Adding value to raw goods in the value-chain

D. Life-saving interventions such as food distribution and health care.

1. What is the main purpose of conflict prevention strategies? Q32

A. To avoid, minimize, resolve and contain conflict

B. To escalate conflict to violence

C. To exploit natural resources for economic gain

D. To prioritize political and institutional responses

1. Which indigenous conflict resolution system is used by the Somali people? Q33

A. Gadaa

C. Shimagle

B. Mada'a

D. T'eer

1. Which one of the following challenges that can hinder good natural resource governance? Q34

A. Clear resource rights and laws.

B. Equitable distribution of benefits and burdens.

C. Public participation and transparency in decision-making.

D. Discriminatory resource policies and lack of environmental assessments.

1. Which one of the following approach to increase livelihood opportunities and reduce vulnerability to resource scarcity? Q35

- A. Expanding reliance on a single scarce resource**
- B. Increasing the value added to existing resources**
- C. Reducing agricultural extension and inputs**
- D. Focusing on protection of natural capital only**

1. Which one of the following is NOT correct about indigenous conflict resolution practices? Q36

- A. Widely used in rural Ethiopia due to limited access to formal systems.**
- B. Rooted in cultures and customs, uniform among ethnic groups.**
- C. Involve elders and clan leaders guided by unwritten laws.**
- D. Aim for reconciliation, win-win solutions, and coexistence.**

1. Which international convention highlights the importance of indigenous rights in natural resource management?

Q37

A. Convention on Cultural Diversity (CCD)

B. United Nations Framework Convention on Climate Change (UNFCCC)

C. Convention on International Trade in Endangered Species (CITES)

D. United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)

1. Which one of the following is the main benefit of using indigenous conflict resolution practices in Ethiopia?

Q38

- A. They are faster and more efficient than the formal system.**
- B. They are based on traditional knowledge and respect for nature.**
- C. They are better equipped to handle complex inter-ethnic conflicts.**
- D. They promote lasting peace and reconciliation between communities.**

1. Which one of the following is the most general definition of a resource? **Q39**

- A. Any element or substance used in manufacturing.**
- B. Any factor contributing to economic growth.**
- C. Any element or substance useful for human needs.**
- D. Any non-living component of the environment.**

1. What characteristic distinguishes renewable resources from non-renewable resources? **Q40**

- A. Their geographic distribution**
- B. Their economic value**
- C. Their rate of regeneration**
- D. Their origin as biotic or abiotic**

1. Why are most mineral resources classified as non-renewable resources? Q41

A. They are too expensive to extract.

B. They are harmful to the environment.

C. They are not found evenly distributed worldwide.

D. They take millions of years to naturally replenish.

1. Which term is used to describe resources that are limited in quantity and cannot be replaced? Q42

A. Reoccurring resources

C. Flow resources

B. Sustainable resources

D. Fixed resources

1. One of the ff. is the main consequence of supply-induced scarcity for livelihood strategies? **Q43**

A. Increased investment in resource conservation and protection

B. Reduced options for pursuing productive livelihood activities

C. Increased cooperation and collaboration between user groups

D. Development of new technologies for resource extraction

1. How can structural scarcity contribute to resource conflicts even in well-functioning governance systems?

Q44

- A. Through limitations in resource delivery infrastructure**
- B. Due to environmental degradation and natural resource depletion**
- C. As a result of unequal access to resources based on social factors**
- D. Through competition for economic benefits from resource exploitation**

1. Which statement best describes the role of poverty in resource conflicts? Q45

- A. Poor countries are inherently more prone to resource-related conflicts.**
- B. Poverty can limit access to resources and act as a barrier to conflict resolution.**
- C. Wealthy individuals are always at a disadvantage in resource conflict situations.**
- D. Poverty has no significant impact on the potential for resource conflicts.**