

## **Biodiversity Protection, Farmers and Breeders Right**

**Prof. Padmavati Manchikanti, Prof. Narendran Thiruthy | IIT Kharagpur**

### **Lecture 38 : Sustainable Development Agenda**

Welcome to the course on Biodiversity Protection Farmers and Breeders Rights. This lecture will be about Sustainable Development Agenda. The concepts covered in this lecture are sustainable development, sustainable development goals, the 2030 Agenda for Sustainable Development, Decade of Action, 17 goals to transform our world. The keywords for this lecture are sustainable development, poverty, clean energy, economic growth, climate emergency. These are the icons which represent the 17 goals to transform our world.

The icon number 1 represent no poverty which is a goal of sustainable development agenda. Icon number 2 represents zero hunger. Icon number 3 represents good health and well being. Icon number 4 represents quality education.

Icon number 5 represents gender equality. Icon number 6 represents clean water and sanitation. Icon number 7 represents affordable and clean energy. 8 represents decent work and economic growth. 9 represents industry innovation and infrastructure.

10 represents reduced inequalities. 11 represent sustainable cities and communities. 12 represents responsible consumption and production. 13 represents climate action. 14 represents life below water.

15 represents life on land. 16 represents peace justice and strong institutions. 17 represents partnerships for the goals. So, these represents the 17 goals which are part of the sustainable development goals which is meant to transform our world by the year 2030. The sustainable development goals are universal call to action to end poverty, protect the planet and improve the lives and prospects of everyone everywhere.

The 17 goals were adopted by the United Nations member states in 2015 as part of the 2030 agenda for sustainable development which set out a 15 year plan to achieve the goals. Today, the progress is being made in many places, but overall action to meet the goals is not yet advancing at the speed or scale required. The United Nations Secretary General called on all sectors of the society to mobilize for a decade of action starting from 2020 to 2030 on 3 levels. One is global action to secure greater leadership, more resources and smarter solutions for sustainable development goals. Second level is local action,

embedding the needed transitions in the policies, budgets, institutions and regulatory frameworks of the governments, cities and local authorities.

The third level people action including by youth, civil society, the media, the private sector, the unions, academia and other stakeholders to generate an unstoppable moment pushing for the Rookier transformations. This also stems from the realization that achieving the 17 goals may not be possible by the efforts from governmental sites alone. So, this Rookier's participation at the local level with the involvement of people around the world in order to meet the targets by the year 2030. So, that is why the year starting from 2020 to 2030 is considered as the decade of action for the achievement of the goals of sustainable development agenda. Numerous civil society readers and organizations have also called for a super year of activism to accelerate progress on the sustainable development goals, urging world leaders to Redouble efforts to reach the people farthest behind, support local action and innovation, strengthen the data systems and institutions, rebalance the relationship between people and nature and unlock more financing for sustainable development.

At the core of the 20 to 2030 decade is the need for action to tackle growing poverty, empower women and girls and address climate emergency. The goal number 1 deals with end poverty in all its forms everywhere. Eradicating extreme poverty for all people everywhere by 2030 is a pivotal goal of the 2030 agenda for sustainable development. Between 2015 and 2018 global poverty continued its historical decline with the poverty rate falling from 10 percentage in 2015 to 8.6 percentage in 2018.

Now, Kast suggests that owing to the COVID-19 pandemic, the global poverty rate increased sharply from 8.3 percentage in 2019 to 9.2 percent in 2020 representing the first increase in the extreme poverty since 1998 and the largest increase since the 1990s and setting back poverty reduction by about 3 years. The impact of COVID-19 pandemic reversed the steady progress of poverty eradication over the past 25 years. This unprecedented reversal is being further exaggerated by raising inflation and impacts of the wars in Ukraine.

It is estimated that these combined crisis will lead to an additional 75 million, 95 million people living in poverty in 2022 compared with pre-pandemic positions. Goal number 2 deals with zero hunger. Sustainable development goal 2 is about creating a world free of hunger by 2030. In 2020 between 720 million to 811 million persons worldwide were suffering from hunger roughly 165 million more than 2019. Also, in 2020 a staggering 2.

4 billion people or above 30 percentage of the world's population were moderately or severely food insecure lacking regular access to adequate food. The figure increased by

nearly 320 million in just 1 year. Globally 149.2 million children under 5 years of age or 22 percentage were suffering from stunting in 2020 a decrease from 24.

4 percent in 2015. The number of people going hungry and suffering from food insecurity has been gradually rising between 2014 and the onset of COVID-19 pandemic. The COVID-19 crisis has pushed those rising rates even higher and also exaggerated all forms of malnutrition particularly in children. The COVID-19 pandemic had a very drastic impact on the food security of the planet. Just like it has affected all other aspects of human life, it also had impact on the poverty eradication programs that were being carried out worldwide by the governments and non-governmental organizations. Goal number 3 of the sustainable development goals deals with ensuring healthy lives and promoting well-being for all at all ages.

Ensuring healthy lives and promoting well-being at all ages is essential to sustainable development. Global health is essential to sustainable development. The 2030 agenda takes into account the economic and social inequalities, rapid urbanization, threat to climate and the environment, the continuing burden of infectious diseases and emerging challenges such as non-communicable diseases. The universal health coverage will be integral to achieving sustainable development goal number 3 ending poverty and reducing inequalities. Emerging global health priorities not explicitly included in the sustainable development goals including antimicrobial resistance also demand action.

Goal number 4 deals with quality education. Providing quality education for all is fundamental to creating a peaceful and prosperous world. Education gives people the knowledge and skills they need to stay healthy and get jobs and foster tolerance. Achieving inclusive and quality education for all reaffirms the belief that education is one of the most powerful and proven vehicles for sustainable development. This goal ensures that all children complete free and free primary and secondary age schooling by the year 2030.

The goal aims to provide equal access to affordable vocational training and eliminate gender and wealth disparities and achieve universal access to quality higher education. Goal number 5 deals with achieve gender equality and empower all women and girls. Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world. Putting an end to all forms of discrimination against women and girls is not only a basic human right, it is crucial for a sustainable future. Empowering women and girls will have positive impact on economic growth and development.

Women must be entitled to equal rights on land and property, sexual and reproductive

health, and access to technology and the internet. The percentage of women in public office has increased more than ever before. However, encouraging more women leaders will help achieving greater gender equality. Achieving gender equality and empowering all women and girls is thus one of the important goals of the sustainable development agenda. Goal 6 of the sustainable development goals deals with ensuring access to water and sanitation for all.

Ensuring access to safe water, sanitation and hygiene is the most basic human need for health and well being. Billions of people will lack access to these basic services in 2030 unless progress quadruples. Due to rapid population growth, urbanization and increasing water needs from agriculture, industry and energy sectors, the demand for water is rising. Decades of misuse, poor management, over extraction of groundwater and contamination of freshwater supplies have exaggerated water stress. In addition, countries are also facing growing challenges linked to degraded water related ecosystems, water scarcity caused by climate change, underinvestment in water and sanitation and insufficient cooperation on transboundary waters.

To reach universal access to drinking water, sanitation and hygiene by 2030, the current rates of progress would need to increase for fault. Achieving these targets would save lakhs of people annually who die from diseases directly attributable to unsafe water, inadequate sanitation, poor hygiene practices. Goal number 7 of the sustainable development goals deals with ensuring access to affordable, reliable, sustainable and modern energy. Goal number 7 is about ensuring access to clean and affordable energy which is key to the development of agriculture, business, communication, education, healthcare and transportation. The lack of access to health energy hinders economic and human development.

The entire mankind is dependent upon the availability of energy resources for their survival and sustenance. The industry sector is extremely dependent upon the availability of energy sources. So, dependence on non-renewable energy sources has significant detrimental effects on the biodiversity. So, utilizing renewable energy resources and increasing the reliance on such resources is extremely important for the achievement of goal number 7. Latest data suggest that world continues to advance towards sustainable energy targets.

However, current pace of progress is insufficient to achieve goal 7 by 2030. Huge disparities in access to modern sustainable energy persist. Continued policy support and massive mobilization of public and private capital for clean and renewable energy especially in developing countries will be required to achieve energy and climate goals. Promoting inclusive and sustainable economic growth, employment and decent work for all is the focus of goal number 8. Goal 8 is about promoting inclusive and sustainable

economic growth, employment and decent work for all.

The COVID-19 pandemic precipitated the worst economic crisis in decades and reverse progress towards decent work for all. The sustainable development goals promote sustained economic growth, higher levels of productivity and technological innovation. Encouraging entrepreneurship and job creation are key to this as are effective measures to eradicate forced labor, slavery and human trafficking. With these targets in mind, the goal is to achieve full and productive employment and decent work for all women and men by the year 2030. Goal number 9 deals with building resilient infrastructure, promoting sustainable industrialization and fostering innovation.

Goal number 9 seeks to build resilient infrastructure, promote sustainable industrialization and foster innovation. Economies with diversified industrial sector and strong infrastructure sustained less damage and are experiencing faster recovery. In 2021, global manufacturing rebounded from pandemic although the recovery remains incomplete and uneven. In 2021, technological progress is the key to finding lasting solutions to both economic and environmental challenges such as providing new jobs and promoting energy efficiency. Promoting sustainable industries and investing in scientific research and innovation are all important ways to facilitate sustainable development.

Goal number 10 of the sustainable development goals deals with reducing inequality within and among the states. Reduction of inequalities and ensuring no one is left behind are integral to achieving the sustainable development goals. Inequality within and among the countries is another serious concern. Global solutions are essential to address income inequality. This involves improving the regulation and monitoring of financial markets and institutions, encouraging development assistance and foreign direct investment to regions where the need is greatest.

Facilitating the safe migration and mobility of people is also key to bridging the widening divide. Goal number 11 of the sustainable development goals deals with making cities inclusive, safe, resilient and sustainable. Goal number 11 is about making cities and human settlements inclusive, safe, resilient and sustainable. Making cities sustainable means creating career and business opportunities, safe and affordable housing opportunities and building resilient societies and economies. It involves investment in public transport, creating green public places and improving urban planning and management in participatory and inclusive ways.

Goal number 12 deals with ensuring sustainable consumption and production patterns. Goal number 12 is about ensuring sustainable consumption and production patterns which is key to sustaining the livelihoods of current and future generations. The efficient

management of our shared natural resources and the way we dispose of toxic waste and pollutants are important targets to achieve the goal. Encouraging industries, businesses and consumers to recycle and reduce waste is equally important in this regard. Similar is supporting developing countries to move towards more sustainable patterns of consumption by the year 2030.

A large share of world population is still consuming far too little to meet even their basic needs. Having the per capita of global food waste at the retailer and the consumer levels is also important for creating more efficient production and supply chains. This can help with food security and shift us towards a more resource efficient economy. Goal number 13 deals with taking urgent action to combat climate change and its impacts. Supporting vulnerable regions will directly contribute not only to goal 13, but also to other sustainable development goals.

These actions must also go hand in hand with the efforts to integrate disaster risk measures, sustainable natural resource management, human security into national development strategies. It is still possible with strong political will, increased investment and the use of existing technology to limit the increase in global mean temperature to 2 degrees Celsius above the pre-industrial levels aiming at 1.5 degrees Celsius. But this requires urgent and ambitious collective action. Goal number 14 deals with conserving and sustainably using oceans, seas and other marine resources.

It is about conserving and sustainably using oceans and sea and marine resources that is healthy oceans and seas are essential to human existence and life on earth. The sustainable development goals aim to sustainably manage and protect marine and coastal ecosystems from pollution as well as address the impacts of ocean acidification. Enhancing conservation and sustainable use of ocean based resources through international law will also help mitigating some of the challenges we are facing which are related to our oceans. Goal number 15 deals with sustainably managing forests, compacting desertification, halting and reversing land degradation and halting biodiversity loss.

Goal number 15 is about conserving life on land. It is to protect and restore terrestrial ecosystems, sustainably managing forest, compacting desertification, halting and reversing land degradation and stopping biodiversity loss. urgent action must be taken to reduce the loss of natural habitats and biodiversity which are part of our common heritage and support global food and water security, climate change mitigation and adaptation and peace and security. Goal number 16 deals with promoting just peaceful and inclusive societies. Goal number 16 is about promoting peaceful and inclusive societies by providing access to justice for all and building effective accountable and inclusive institutions at all the levels. The sustainable development goals aim to significantly reduce all forms of violence and

work with governments and communities to end conflict and insecurity.

Promoting the new rule of law and human rights is key to this process as is reducing the flow of illicit arms and strengthening the participation of developing countries in the institutions of global biodiversity governance. Goal number 17 deals with revitalizing the global partnership for sustainable development. Goal number 17 is about revitalizing the global partnership in order to meet the goals related to sustainable development. The goals aim to enhance north-south and south-south cooperation by supporting national plans to achieve all the targets. Promoting international trade and helping developing countries increase their exports is all part of achieving a universal rule based and equitable trading system that is fair and open and benefits everyone.

To conclude, sustainable development has been defined as development that needs the needs of the present generation without compromising the ability of future generations to meet their own needs. The developmental needs of mankind has to be taken care, but decisions regarding developmental needs has to be carefully taken because we have to take into account the needs of future generations also. Developmental needs are always based on the needs of the present generation, but when a decision is taken which has drastic impact on the biodiversity around us as well, then we need to take into account the needs of the future generations as well. Whatever decisions we do we take and whatever developmental activities which are undertaken by the present generation should not compromise the ability of future generations to meet their own needs. Sustainable development calls for concerted efforts towards building an inclusive, sustainable and resilient future for the people and the planet.

So, the new approach towards environmental conservation which is signified by sustainable development is not just following the protectionist approach, but it calls for concerted efforts towards building an inclusive. So, that means involving everyone around irrespective of caste, creed, country or regional status, sustainable and resilient future for people and the planet. So, that means decisions on development has to be taken based on considerations of sustainability. For sustainable development to be achieved it is crucial to harmonize three core elements economic growth, social inclusion and environmental protection. These elements are interconnected and all are crucial for the well being of individuals and societies.

The references for this lecture can be seen here. Thank you very much for listening to the lecture. I hope you are enjoying the course.