



## Sustainable agriculture's contribution to sustainable development

Dr. Pushpa Dewangan

Principal & Head, Department of Economics, K.P. College Bandhapali, Sarangarh, Chhattisgarh, India

### Abstract

Development may be made sustainable by humanity so that it satisfies current demands without endangering the capacity of future generations to satisfy their own. The idea of sustainable development does involve restrictions—not absolute ones, but limitations imposed on natural resources by the current stage of social organization and technology, as well as by the biosphere's capacity to absorb the impacts of human activity. However, a new era of economic prosperity may be ushered in by managing and improving social organization and technology. According to the Commission, pervasive poverty is no longer unavoidable. Not only is poverty a bad thing in and of itself, but sustainable development necessitates providing for everyone's fundamental necessities and giving everyone the chance to realize their dreams of a better life. Ecological and other disasters will always be a possibility in a society where poverty is pervasive. For countries where the majority of people live in poverty, meeting basic necessities necessitates not just a new period of economic growth but also guarantees that the poor receive an equitable share of the resources needed to maintain that progress. More democracy in international decision-making and political systems that ensure effective public engagement in decision-making would support such fairness. More affluent people must adopt lifestyles that respect the planet's ecological resources, such as how they consume energy, in order to promote sustainable global development. Furthermore, fast population expansion can limit any gain in living standards and put more strain on resources; hence, sustainable development can only be undertaken if population growth and size are in line with the ecosystem's shifting productive capacity.

**Keywords:** Sustainable agriculture, investment, food security, environmental protection

### Introduction

Environmentally friendly agricultural practices that enable the production of crops or livestock without endangering natural or human systems are known as sustainable agriculture. Preventing negative impacts on soil, water, biodiversity, downstream resources, and people who work or live on the farm or nearby is part of it. The idea of sustainable agriculture transcends generations, transferring a preserved or enhanced natural resource, biotic, and economic foundation instead of one that has been exhausted or contaminated. Permaculture, agroforestry, mixed farming, multiple cropping, and crop rotation are components of sustainable agriculture. In recent years, a plethora of sustainability certification programs and standards have been developed, providing consumers with options for sustainable agricultural methods. These consist of Global Economic and Social Survey, Organic, 2013: Sustainable Development Issues DESA The UN Secretariat's Department of Economic and Social Affairs serves as a crucial link between national action and international economic, social, and environmental policy. The Department's activities are divided into three primary, interconnected areas: (i) it gathers, creates, and evaluates a vast array of economic, social, and environmental data and information that UN members use to review shared issues and assess potential policy options; (ii) it assists Member States in negotiating joint strategies in numerous intergovernmental bodies to address current or new global issues; and (iii) it provides interested governments with guidance on how to convert policy frameworks created at UN summits and conferences into national programs and, through technical support, aids in the development of national capacities.

Summary Challenges for global sustainable development beyond 2015 The United Nations Millennium Declaration, which served as the foundation for the pursuit of the Millennium Development Goals, was approved by global leaders in September 2000. It was effective in creating a worldwide agreement about the significance of human development and poverty alleviation. Since then, the international community has succeeded in elevating a sizable portion of 1 See resolution 55/2 of the General Assembly. In conclusion, there are issues facing the globe in the areas of economic, social, and environmental sustainable development. Over 1 billion people continue to live in severe poverty, and wealth inequality has been growing both within and across nations. At the same time, unsustainable patterns of production and consumption have led to significant social and economic consequences and may jeopardize life as we know it. Achieving sustainable development would need international effort to fulfill the justifiable desire for more economic and social advancement, which calls for jobs and growth while also bolstering environmental preservation. The needs of the most vulnerable and impoverished people must be given special consideration in sustainable development, which must be inclusive. Strategies must be bold, focused on taking action, cooperative, and flexible enough to accommodate varying stages of growth.

### Difficulties for global sustainable development after 2015

The sustainability of cities depends on effective urban administration. If a framework of policies is not put in place to address this issue, the number of people living in slums might quadruple by 2050. The sustainability of the food

system may be enhanced by reducing food waste. One of the main components of the sustainable development agenda must be the transformation of the energy system. Public expenditure needs to be increased in order to meet the Millennium Development Goals. It will take collaboration at several levels to finance cities' sustainability. To fund the sustainable development of cities, national and municipal authorities must work closely together. However, cities must directly use capital markets to raise funds. To ensure that municipal borrowing does not lead to an overabundance of non-performing loans in the banking system or the central government incurring enormous financial obligations, financial supervision procedures must be in place to control risks. To assist green technology adaption and capacity building, as well as to offer access to public transit, well-built housing, water and sanitation, power, health care, and education, poorer cities require international collaboration and more funding. Financing public infrastructure, including climate change adaptation and mitigation, is a difficult undertaking that frequently requires significant upfront financial outlays with mostly medium- and long-term returns. Policies that promote renewable energy and lessen wasteful and inefficient usage are necessary in wealthier cities. Regulations have a key role in setting prices, taxes, and subsidies for businesses and consumers, as well as in the creation of compact communities and building retrofits. The difference between the real cost of services and the financial expenditure can be covered by a variety of levies, such as reduced public transportation fees. Therefore, tackling global environmental issues and the welfare of current and future generations would require a portion of the funding for both wealthy and impoverished cities.

Investments in agricultural development will be substantial. Over the 44-year period from 2005–2007 to 2050, the expected investment needs for primary agriculture and related downstream businesses in developing nations was US\$ 9.2 trillion (2009 dollars). Higher investment in primary agriculture, particularly on small farms, is hampered by several issues. The potential returns on farmers' investments are limited by the inadequacy of public services. The absence of pricing incentives for small-scale producers is another problem, especially when food product price limits lower their potential net revenue. The inability of smallholders to get official insurance protection against dangers is a third problem. Investments from the private sector will be required. When focused on strategic requirements, private investments—especially foreign private investments—can significantly increase productivity and guarantee food security in agriculture. Governments must, however, develop laws and regulations that help foster an environment that is more favorable to inclusive and sustainable investments if they hope to maximize the benefits of these investments. For example, direct incentives like tax breaks might promote investments that directly help smallholders in the area. When small-scale farmers receive assistance in contract negotiation and conflict resolution, contract farming can also result in positive investment. It is obvious that the demands in these areas cannot be met by public means alone. A framework for funding sustainable development must guarantee the acquisition of funding from public and private sources at the national, regional, and global levels. In sectors that are essential for long-term growth, financing has failed:

International private actors will need to make large investments in sustainable development. The availability of public funds to match private investments—through guarantees and/or regulations to ensure future revenue streams—will be crucial in ensuring that a sizable portion of the investments required to achieve sustainable development come from private sources. It will consequently be necessary to mix public funding, regulation, and private market-based financing, depending on the unique features of the newly generated assets. An enabling policy environment at the national and international levels, as well as renewed promises to ODA, will be necessary to support a framework for funding sustainable development. Policy measures to internalize externalities, improve the alignment of corporate incentives with public objectives, and fund global issues are all necessary components of such a system. Since national policies are an integral element of the international and regional framework, and international and regional policy agreements influence national plans, policy consistency across domestic, regional, and international activities is essential.

#### **Image credit**

The strategy of the sustainable development includes:

- Preservation of natural and available resources
- Prevention of environmental pollution (most emphasis is put on CO<sub>2</sub> or carbon dioxide emissions)
- The preservation and improvement of ecology: the protection of plant and animal species, ie. biological diversity, ecosystem conservation
- Production of organic food
- Improvement of agriculture
- Energy savings in every possible segment go life
- The process planning of living standard for the 10 billion people
- Poverty reduction strategy
- Reduction of the mass consumption of consumers' goods

#### **Global climate changes**

Without sacrificing the capacity of future generations to satisfy their own demands, sustainable development "meets the needs of the present." Also, it "requires meeting everyone's basic needs so they can fulfill their aspirations for a better life." A world where poverty is pervasive will always be vulnerable to natural disasters and other calamities. To understand what sustainable development entails in their own nation, nations must learn from one other's successes and mistakes. I wish to draw attention to the fact that sustainable development is divided into three categories: social, environmental, and economic. The government must take action and put in place a sufficient strategy to safeguard and enhance the environment while pursuing sustainable growth. Let's get started! There are many different approaches and methods to solve this significant problem. "Green growth" is the name of one of the tactics. "Green growth"—why? Many nations have been alerted by the current crises to the need for various forms of economic growth. As a result, several countries are putting policies in place to aid in the green recovery. In addition to innovations, becoming green may be a long-term driver of economic growth through, for example, investments in renewable energy and increased material and energy efficiency. There are usually two sides to any issue in life;

in this instance, the economic and scientific advancements are one side, while the environmental contamination is the other. I hate having to voice my displeasure and disgust with the state of nature right now, which includes a depleted ozone layer, contaminated air, water, and soil, among other issues. The list goes on and on! Unfortunately, halting the self-serving goals that are causing us to face a natural tragedy will take a long time. In addition to this, it appears that economic expansion and progress are nearly impossible to achieve without causing environmental disruption (I hope you agree). I have one last question for you, everyone: Do you believe that the most effective strategy for achieving sustainable development is green growth?

There is always an alternate answer, as I have stated, and it is our responsibility to utilize it. We are unaware of the little things that may make a big difference on the environment. This is what I propose:

1. Let's ride a bike instead of a motorbike! The outcomes are numerous and advantageous: inexpensive transportation, no need to refuel, and workout without contributing to air pollution!
2. Chewing gum is an alternative to smoking cigarettes that poses no risk to the air or public health.
3. When not in use, turn off lights! Put trash in the proper place!

What suggestions do you have? Let your creativity and imagination go wild and share it with us!

### **Implementing sustainability**

By asking what communities should accomplish, starting a goal-oriented planning and development process, and making the most of the available development tools and local decision-making process, sustainable community planning and development may offer guidance. As the Cheshire Cat tells Alice, a local government should start by deciding where to go and realizing how important it is to get there. Next, outline many useful steps:

- Set both broad and specialized community goals.
- Examine certain community segments, such as a transit system, a downtown business district, or a collection of communities, to determine which ones should be the focus of sustainable development.
- Determine success indicators and make sure they are directly related to the community's objectives.
- Reach a consensus and gather opinions on the objectives from all segments of the community, including citizens, the media, companies, grassroots organizations, civic associations, schools, and so on.
- Create a strategic plan to accomplish these objectives. Specific goals, the timeline for achieving them, the method by which they will be achieved, the participants, and strategies for garnering support and announcing successes should all be covered in this plan.
- Create a set of design principles that will be applied throughout the planning and development phase. Modern knowledge, literature, staff, and other resources as required should all be included in these standards. Every guideline need to be directly related to the objectives of the community.
- Determine and accept any possible obstacles to achievement. If productive discussion and agreement are to take place throughout this process, it is important

to be conscious of both the obstacles and the possibilities.

### **Food security**

Maintaining the Potential Global grain output has been increasing at a faster rate than global population growth. However, the number of people worldwide who do not obtain enough food is growing every year. Though food is frequently unavailable where it is required, global agriculture has the ability to provide enough food for everyone. In developed nations, production has often been heavily supported and shielded from global competition. Overuse of soil and chemicals, chemical contamination of food and water supplies, and rural deterioration have all been facilitated by these incentives. A large portion of this work has resulted in surpluses and the corresponding financial strains. Additionally, part of this excess has been transferred to developing countries at discounted prices, undermining their agricultural strategies. However, several nations are becoming more conscious of the negative effects such routes have on the environment and the economy, and agricultural policies place a strong focus on promoting conservation. The reverse issue, however, has plagued many emerging nations: inadequate assistance for farmers. In many cases, a significant advancement in food production has been made possible by enhanced technology combined with government assistance and pricing incentives. However, small farmers that raise food have been overlooked elsewhere. Many are forced into marginal terrain, which is too dry, too steep, and deficient in nutrients, due to frequently insufficient technology and a lack of financial incentives. They destroy forests and leave productive dry plains bare. To promote production, particularly of food crops, the majority of developing countries require more efficient incentive schemes. The 'terms of commerce' must be changed to the small farmer's advantage. On the other side, the majority of developed countries need to change their current systems to minimize surpluses, lessen unfair rivalry with countries that could really have comparative advantages, and encourage environmentally friendly agricultural methods. Given that hunger frequently results from a lack of purchasing power rather than a shortage of food, food security necessitates consideration of distributional issues. Land reforms and measures to safeguard vulnerable pastoralists, subsistence farmers, and landless groups—which will number 220 million families by the year 2000—can help advance it. Integrated rural development that expands employment possibilities both within and outside of agriculture will be essential to their increased prosperity.

### **Ecosystems and species**

There is stress on the planet's species. Although there is disagreement on the rates and the hazards involved, there is increasing scientific agreement that species are becoming extinct at rates never seen on Earth. But we still have time to stop this trend. The regular operation of ecosystems and the biosphere overall depends on species diversity. The world economy benefits from the billions of dollars that wild species' genetic material generates each year in the form of new medications, improved agricultural varieties, and industrial raw materials. But in addition to practical considerations, there are ethical, cultural, artistic, moral, and strictly scientific justifications for protecting wild animals.

Establishing the issue of endangered species and ecosystems as a significant resource and economic concern should be the top priority on governmental agendas. While growing them economically, governments may prevent the devastation of tropical forests and other biological diversity reserves. Reforming concession terms and forest income systems might reduce deforestation, encourage more effective, long-term use of forest resources, and generate billions of dollars in new revenue. Much greater regions placed under a certain level of protection must be included in the network of protected areas that the world will require in the future. As a result, conservation will become more expensive, both directly and in terms of lost development prospects. However, the prospects for growth will be improved in the long run. Therefore, the issues and prospects of species conservation should get thorough and methodical attention from international development organizations.

### Conclusion

In developed nations, production has often been heavily supported and shielded from global competition. Overuse of soil and chemicals, chemical contamination of food and water supplies, and rural deterioration have all been facilitated by these incentives. A large portion of this work has resulted in surpluses and the corresponding financial strains. Additionally, part of this excess has been transferred to developing countries at discounted prices, undermining their agricultural strategies. However, several nations are becoming more conscious of the negative effects such routes have on the environment and the economy, and agricultural policies place a strong focus on promoting conservation. On the other hand, the opposite issue has plagued many emerging nations: inadequate assistance for farmers. In many cases, a significant advancement in food production has been made possible by enhanced technology combined with government assistance and pricing incentives. However, small farmers that raise food have been overlooked elsewhere. Many are forced into marginal terrain, which is too dry, too steep, and deficient in nutrients, due to frequently insufficient technology and a lack of financial incentives. They destroy forests and leave productive dry plains bare. To promote production, particularly of food crops, the majority of developing countries require more efficient incentive schemes. The 'terms of commerce' must be changed to the small farmer's advantage. On the other side, the majority of developed countries need to change their current systems to minimize surpluses, lessen unfair rivalry with countries that could really have comparative advantages, and encourage environmentally friendly agricultural methods.

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