

# Exploring the Role of Youths in Promoting Waste Reduction and Recycling in Arunachal Pradesh

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## Abstract

*Arunachal Pradesh is a state located in the Eastern Himalayas that has become a hotspot for biodiversity, where it is gradually experiencing an alarming rate in the management of its wastes due to urbanization and transformation of people's consumption patterns. The study explores the contribution of youths in waste management and recycling in the state will be discussed in this research paper. Notably, this study aims at highlighting ways through which youths can and are already participating in encouraging sustainable waste management as informed by the demographic dividend of a youthful and environmentally friendly population. Such roles include awareness creation, mobilization of the communities, technological development, advocacy, innovative business development, sensitization, positive demonstration, cross-generational influence, participating in the implementation of policies, and preservation of traditional environmental knowledge. This paper perceives that due to evaluation of other existing interventions, assessment of the possible ways to engage and empower the Arunachal Pradesh youths for ensuring sustainable and effective waste disposal and recycling initiatives for protecting the nature and environment for the future generation of Arunachal Pradesh.*

**Keywords:** Waste management, waste recycling, youths, mobilization, technological development, and environment.

## Introduction

Arunachal Pradesh is called the “Land of the Dawn-Lit Mountains” due to the splendor of its natural beauty, including bio-diversity, colorful indigenous people, etc. But like all other growing areas of development the state is also facing problems of waste management. The population increase, newer way of living standard or the dioxo style of living, the non-biodegradable products cause the enhancement in the waste production and that in turn, has potential to disturb the flora and fauna balance and elegance of the region. Lack of appropriate and timely waste management facility and techniques also leads to environmental pollution, health issues and the depletion of natural resources which is not conducive for the sustainable development of the state. In this regard, the youths play a vital role. The youths are the most populous group of people in Arunachal Pradesh, which means they are the energetic, creative

and powerful players who can bring differences. They show determination to extend their efforts in environmental conservation specifically in the management of wastes and recycling and this is a social benefit. They are the future leaders and the pioneers of various reforms and responsible waste management practices within human society. It is not only helpful to discern the involvement of youths in such endeavors but particularly where processes of drafting endeavors and programmed sensitization that would appeal to their deep need to be initiated. From interviews, case studies, and observations within communities in Arunachal Pradesh, this study purposes to unveil the arising awareness of the youths in the state and spark and environment responsibility of the future generation. Thus, it emphasizes the community's capacity for young people in the process of becoming agents of sustainable transformation of the environment in the long term in the region.

### **Concept of Waste Reduction and Recycling**

Waste reduction refers to the practice of minimizing the amount of waste generated by individuals, businesses, and communities in order to protect the environment, conserve resources, and promote sustainable living. It involves strategies and actions aimed at preventing waste at its source rather than dealing with it after it has been created. It also includes practices like reusing, repairing, and repurposing materials, which extend the life of products and reduce the need for new resources. At a larger scale, manufacturers can contribute by designing products that are durable, easy to repair, and made from sustainable materials. Governments and institutions can support waste reduction through policies that encourage recycling, composting, and responsible disposal. Waste reduction is essential not only for decreasing the volume of garbage sent to landfills and incinerators but also for cutting down pollution, reducing greenhouse gas emissions, and preserving natural ecosystems.

Recycling is the process of collecting, processing, and transforming waste materials into new products, thereby reducing the need for raw materials and minimizing environmental impact. It plays a crucial role in waste management by diverting materials from landfills and conserving natural resources such as water, timber, and minerals. Recycling helps in reducing energy consumption and greenhouse gas emissions, as manufacturing products from recycled materials often requires less energy than producing them from virgin resources. Commonly recycled materials include paper, cardboard, glass, plastics, metals, and certain types of electronics. The recycling process typically involves three main steps: collection and sorting, processing and cleaning, and remanufacturing into new products. For instance, used paper is collected, cleaned, and turned into new paper products, while plastics can be melted and remolded into new containers or packaging.

### **Significance of the Study**

Research on the involvement of youths in the area of waste management and recycling in Arunachal Pradesh is crucial as they hold the key to effective stewardship of environmental conservation. Youths are the energetic, changeable, and influential when it comes to leading a change in the behaviors within the communities. Consumers' participation is crucial in such a

state with great biodiversity but increasing waste problems to increase awareness, accept positive changes, and support local waste management. By so doing, this study should be able to expose some challenges and possibly alternatives that can be embraced by Policy makers as well as educators in an attempt to foster and encourage young persons' participation. And this in turn helps in the enhancement of sustainable development as it empowers the generation to come up with a cleaner environment for Arunachal Pradesh.

### **Objectives of the Study**

1. To study the role of youths in promoting waste reduction and recycling.
2. To study the Impact of waste reduction and recycling in environment.

### **Methodology**

The study is purely based on secondary sources of data and descriptive in nature. The data collected for the study are from various secondary sources viz. research paper, journals, government official publications, books, different websites, newspapers etc.

### **Roles of Youths in Promoting Waste Reduction and Recycling in Arunachal Pradesh**

The generation of Arunachal Pradesh can really bring a change through its youth who can work with new ideas, fresh energy, and openness to learn and adapt in regards to waste management of Arunachal Pradesh. People can also be involved in a deeper sense and become active initiators of a powerful and environmentally friendly existence. Below are ten areas that youth can and are getting involved with engaging activities in the following areas leading to the promotion of waste reduction as well as recycling in the state:

1. **Awareness Generation and Education:** Young people are good at passing information to the community, using innovations, peers, families, and other acquaintances in passing information about waste reduction and proper recycling. They can also use social media, school interviews, community awareness, and arts to educate people concerning the effects of environmental pollution by wastes, the importance of recycling, and methods of minimizing the generation of wastes. With the help of the digital media and the materials they create to share online, they lead the viewers towards Environmentalism adopting philosophy.
2. **Technological Innovation and Solutions:** Youth from developing countries adopt new technologies to address problems of waste management experienced in respective societies. They can search and apply new techniques on segregation and processing of waste, and how to recycle them. This can included creating applications that will be used in the management of waste collections, establishing interfaces which will link the waste producers to the recyclers or coming up with products that have been made from wastes. Thus, they can play a positive role in the effort to improve efficiency of the waste management systems.

3. **Entrepreneurship and Green Businesses:** It was also found that young individuals are in a position to foster sustainable MWM businesses. They can start businesses that are related to waste management that entails collection of wastes and recycling and converting wastes into products with added value, disposal of wastes to offer environment friendly substitutes for products that can be used for a short time only. Especially, they can encourage others to follow suit in this area, provide proofs that green jobs are feasible and help Arunachal Pradesh towards the state of circular economy.
4. **Leading by Example and Promoting Sustainable Lifestyles:** Leadership is about example, hence leaders should necessarily lead toward practicing sustainable consumption and production patterns. The biggest function of youth is to set an example in most cases. Then they should be able to adopt friendly lifestyles within their circles and ensure others copy from them. This entails proper disposal of waste at home, avoiding the use of plastics, using reusable products, disposing off organic matter through composting, among other things. They can also become an excellent example of being environmentally friendly.
5. **Education and Curriculum Integration:** The youth should engage in constant pressure to have the topic dealing with waste management and environmental sustainability be included in the school as well as the college curriculums. Thus, raising environmental awareness they can help people of the successive generations discover appropriate ways of solving the problems concerning waste. They can also promote and organize education campaigns, as well as seminars in the school to educate other students.
6. **Intergenerational Influence and Family Engagement:** The young people should sustain the role of educating the elderly in the family so that they could change and adapt to proper waste disposal system. In this way, they will promote such changes to their families and come up with campaigns of segregating wastes, minimizing the use of products, and encouraging recycling activities. This intergenerational impact is potentially capable of extending the scope of such changes all the way to societal level with regard to waste disposal tendencies.
7. **Participation in Government and NGO Initiatives:** Youth are also able to engage in waste management programs and activities conducted by governmental and non-governmental organizations. It is important for them to come forward and volunteer in cleaning programs, organise awareness programmes, and contribute to current operations in whatever way they can, as this will go a long way in improving the effectiveness of such programs. As such, their participation is very useful and offers a new perspective and ideas.
8. **Promoting Traditional Ecological Knowledge:** In terms of waste management, Arunachal Pradesh has a great wealth of TEK that can still be seen to be used mostly in a sustainable manner. Therefore, the youths have a great role in documenting and transmitting such practices to the future generations. There is no doubt that melding TEK with scientific data in an effective approach to waste management in Arunachal Pradesh.

### **Impact of Waste Reduction and Recycling in Environment**

Reduction of waste in addition to recycling helps in environmental conservation due to decrease in part in pollution of the environment and protecting the scarce natural resources and also decrease in emission of greenhouse gases. Source reduction ensures that less waste is

generated which in turn means that there will be little contribution to the negativity effects associated with landfills and incinerators in regards to pollution of air and water bodies. Recycling, in the other side, enables turning waste materials into products which have lesser demand for virgin materials, therefore not requiring extraction, refining and processing, all of which are time consuming and damaging to ecosystems. For instance, using paper will save trees and water from being used while when using metals recycling products cuts out the destruction that is usually caused by mining. Additionally, waste reduction and recycling contribute to minimizing plastic waste that is among the most lasting undesirable elements in oceans and among the wildlife. Most marine species have been found to ingest plastics either fully or partially and, in the process, die and the food chain is affected greatly. Since these practices involve the reuse of materials, instead of their disposal, they are likely to reduce greenhouse gas emissions and combat climate change. Most of the time, many communities which promote the use of reusable products, water and energy, save on cost of managing the wastes and get to enjoy better health. Collection and sorting leads to the creation of employment opportunism for the people thus informing the economy in the region. On the same note, promoting sustainable consumption helps people adopt environmentally friendly products and practices like using a reusable bag, composting of organic waste and on the use of plastic materials. To sum up, waste reduction and recycling are not just the environmental philosophy but more desirably theories of development achievements. It shows their contribution towards managing the world's resources, conservancies, and support of global health improves living standards for future generations. Efforts can be made collectively by everyone and with support of the government, which means that major negative impacts on the environment can minimize and make the Earth more sustainable and less vulnerable.

## **Conclusion**

The youths of Arunachal Pradesh are not mere actors that have been placed in an environmental arena to receive the impacts but rather they are the shapers of a future environment which is on the verge of implantation in their state. These attributes have positioned them as the prime movers in efforts towards waste and recycling within the company. The ten roles depicted in this paper include awareness generation, community mobilization, development of new technologies, collaboration with other groups, provision of feedback, education and learning, professionalism and commitment, policy advocacy, innovation, and liberation. To be able to enhance the understanding and practice of effective youth engagement practice in development, education and civil society, efforts of stakeholders such as government agencies, institutions, and organizations as well as communities will have to be utilized fully. It is crucial that the youth are provided with all the resources, channels and chances that will enable them build, and lead change initiatives to enhance youth involvement in decision making processes, and the formulation as well as implementation of change. Promoting the youth participation in organization, making environmental studies a part of education curriculum, support entrepreneurship initiatives towards green economy will enable the young people to be in the vanguard in changing the society. If Arunachal Pradesh starts to pay attention to the role of youth and supporting their passion, the future will unfold and Arunachal Pradesh can become a place where waste is not an option, and the resources are valued as they must be in the "Land

of the Dawn-Lit Mountains”. It is not only desirable but essential to involve the youth in such activities since they pose a great opportunity for the long run sustainability and protection of the evolutionary acclaimed Himalayan Bio-region. Their passion and dedication could provide a ray of hope to the people of Arunachal Pradesh to have a cleaner, Greener and sustainable state of the environment than what it is right now.

## References

- Ampuero, D., Miranda, C.E., Delgado, L.E., Goyen, S., & Weaver, S. (2015). Empathy and critical thinking: Primary students solving local environmental problems through outdoor learning. *Journal of Adventure Education and Outdoor Learning*, 15(1), 64-78.
- Ashok, K. (2023). Promoting youth involvement in environmental sustainability for a sustainable future. *Edumania – An International Multidisciplinary Journal*, 1 21(2), 261-270. <https://doi.org/10.5958/2394-2762.2023.00130.0> .
- Awalia, S., Rashid, A., & Bahari, I. H. (2021). The study of urban waste management through the role of youth as an effort to protect Sinjai area, South Sulawesi Province, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 486(1), 012141. <https://doi.org/10.1088/1755-1315/486/1/012141> .
- Clayton, K. & McCarl, B. (1979). Management of Solid Waste Systems Including Non-Metropolitan Areas, With Emphasis on Resource Recovery. *North Central Journal of Agricultural Economics*, 1, 61-72
- Heikki, T. J. (2000). The Strategic Planning of Municipal Solid Waste Management Resources Conservation and Recycling, 30, 111-133.
- Mashayekh, i A. N. (1992). Under Destruction Rangeland Population Growth: The Case of Iran. *System Dynamics Review* 6167-193.
- Piscitelli, A., D’Uggento, A.M. Do young people really engage in sustainable behaviors in their lifestyles?. *Soc Indic Res* 163, 1467–1485 (2022). <https://doi.org/10.1007/s11205-022-02955-0>.
- Sudhir, V., Srinivasan, G. & Muraleedharan, V. R. (1997). Planning for Sustainable Solid Waste Management in Urban India. *System Dynamics Review*, 13223-246.
- Agenda 21. United Nations Conference on Environment & Development. Rio de Janeiro, Brazil. 3–14 June 1992. Available online: <https://www.mdpi.com6>.
- Education for Sustainable Development Goals-Learning Objectives. UNESCO. 2017. Transforming our World: The 2030 Agenda for Sustainable Development. United Nations. 2015. Available online: <https://sustainabledevelopment.un.org>