

Integrating Community-Based Knowledge Systems into National Strategies for Enhanced Global Sustainability

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Abstract: The idea of embedding the local knowledge systems into the national sustainable development strategies is an essential but under-researched part of the Sustainable Development Goals (SDGs) accomplishment. In this paper, the suggested research approaches are the use of local, Indigenous, and traditional ecological knowledge to create more inclusive, relevant, and sustainable policies. The study examines the obstacles, facilitators, and impacts of incorporating such knowledge into national policy platforms to tackle global issues related to sustainability, especially in climate adaptation, biodiversity conservation, and management of natural resources. It uses a qualitative approach that combines case studies, policy analysis, interviews, and participatory techniques to seek opinions of the community knowledge holders, policymakers, and non-governmental organizations. The results have indicated that incorporating community knowledge into the model is advantageous in terms of increased levels of sustainability, better climate change resilience, and preservation of culture. Nevertheless, the epistemological and institutional resistance, and the absence of legal frameworks are some of the obstacles that interfere with the realization of successful integration. The three approaches to address these barriers include collaborative governance, capacity-building, and flexibility of policies. The paper underlines the significance of community involvement in the process of decision-making and co-production of policies so that the strategies can be context-specific, culturally relevant, and in accordance with the local realities. It also highlights the importance of inclusive policy frameworks that appreciate the power of community knowledge in the realization of long-term and sustainable outcomes. National strategies may be more adaptive and resilient by creating a closer relationship between the local communities and the policymakers. This study will add to the body of knowledge on sustainability scholarship and policy creation by providing viable recommendations that policymakers, practitioners, or researchers should consider in order to incorporate the knowledge of the communities in the SDG implementation process. The paper recommends additional research on how systematic use of community knowledge in the governance mechanisms can be employed to promote the cause of global sustainability.

Keywords: Community-Based Knowledge; Sustainability, SDGs; Climate Adaptation; Biodiversity Conservation; Policy Integration; Indigenous Knowledge; Collaborative Governance.

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I. Introduction

One of the most burning world problems nowadays is the necessity to reach the Sustainable Development Goals (SDGs), which were discussed by the United Nations (UN). The SDGs have high demands on the sustainability of the world, aiming at curbing poverty, protecting the environment, and enhancing equity and justice. Nevertheless, as much as these goals are universal in their scope, the means of implementing them do not take into account the locality of the goals and local knowledge that are important to their effectiveness. A significant component that is lacking in most of the national strategies is the incorporation of community-based knowledge systems. Indigenous knowledge is a community-based knowledge system that also comprises traditional ecological knowledge and local ecological knowledge that are time-tested and entrenched in cultural, environmental, and socio-economic contexts of the practicing communities (Ijiga et al., 2024; Kristian & Ikhsan, 2024). These knowledge systems have been noted to have an excellent record of supporting sustainable management of resources, environmental stewardship, and social resilience (O'Neill et al., 2023; Shammin et al., 2022). Regrettably, this knowledge is not consistently recognized, absorbed, or used in the design of SDG implementation policies on the national level.

There is a significant need to incorporate community-based knowledge into national SDG plans in order to develop inclusive and context-dependent ways of sustainable development (Majebi et al., 2024; Sanusi, 2024). Since sustainability issues are usually specific to the region, it becomes imperative to identify and utilize the local knowledge systems that have developed through the years, enabling the communities to adjust to and handle their surroundings in a sustainable way. Knowledge held by communities has been found especially useful in solving localized issues with complex problems that cannot be effectively managed using top-down policies (Ngo & Creutz, 2022; Yanou et al., 2023). Additionally, the incorporation of the community knowledge is consistent with the global policy agenda as outlined by the UN SDG agenda, particularly those that demand the inclusive governance, environmental conservation, and social justice. The recognition of the significance of local knowledge can address the gap between scientific approaches and conventional practices in the process resulting in more acceptable and sustainable policies. Community knowledge is a fundamentally simple step towards the practical implementation of SDGs in a world where climate change is rising, biodiversity is declining, and inequality is becoming a reality (Suriyankietkaew et al., 2022).

Key Contributions

- The article discusses how the use of local, Indigenous, and traditional ecological knowledge by countries as part of their national strategies can improve the relation ability and efficacy of policies meant to accomplish the Sustainable Development Goals (SDGs).
- It recognizes the major obstacles, including epistemological barriers and institutional resistance and outlines the enablers, such as collaborative governance and capacity building that may help make the process of introducing community-based knowledge into the policy frameworks successful.
- The paper will provide practical suggestions to policy makers on how they can better integrate community knowledge to SDG implementation, which would facilitate more inclusive, adaptive, and sustainable policies.

The structure of the paper is as follows: The Introduction emphasizes the necessity of incorporating the community-based knowledge in the national SDG strategies. The Literature Review would discuss the essential knowledge systems in the community and analyze the problems and possibilities of integration. The Theoretical Framework provides the provision of relevant theories, including collaborative governance and knowledge co-production. The Methodology section is a description of the qualitative method, case studies, policy analysis, and participatory methods. Results and Discussion contain some of the most important findings on integration, barriers, benefits, and implications to policymaking and provide recommendations on future research and practice.

II.Literature Review

Knowledge systems Community-based knowledge systems embrace a diversity of local and traditional knowledge, including Indigenous knowledge, traditional ecological knowledge (TEK), and local ecological knowledge (LEK) (Wahyuni et al., 2024). These systems are entrenched in the cultural, social, and environmental environment of the communities that cultivate them. Indigenous knowledge systems have been developed and transmitted through generations, offering sustainable solutions for future challenges such as climate change adaptation and biodiversity preservation (Suhaeb et al., 2024). Such knowledge systems have typologies that differ depending on the setting, but in most cases, such typologies are ecological knowledge, medicinal knowledge, social practices, and spiritual knowledge that are combined to be used in an effort to manage natural resources and uphold the cultural traditions.

A number of papers have discussed how knowledge systems based in the community would be incorporated into sustainability policies. One of the major conclusions is that although scientific knowledge prevails in national plans, local knowledge might assist in providing critical insights that can enhance the

strengths and the situational suitability of sustainability policies. As an example, the community knowledge can be used to inform the adaptive resource management practices, support the biodiversity conservation process, and play a role in climate change adaptation. A study of Ijiga et al. (2024), Niu et al. (2023) and Maha et al., (2024) prove the successful implementation of community-based partnerships into enhanced health and climate change resilience respectively (Guerrero-Moreno & Oliveira-Junior, 2024).

Research has revealed that among the obstacles that restrict the transfer of community knowledge into the national strategies are variations in the way local and scientific knowledge are understood, institutional aversion, and ethical concerns regarding the utilization of local knowledge without prior notification or recognition. This may, however, be facilitated by such enablers as collaborative governance, capacity building and flexibility of policies (Kaya, 2013). Yanou et al., (2023) and Ozobu et al., (2023) underline the fact that such barriers inclusion with the help of inclusive policy frameworks can be an important step towards more successful community engagement and introduction of local knowledge into the national development agenda (Yeap & Liow, 2024).

The understanding of national SDG strategies in terms of local and community-based knowledge has shown that there are significant gaps. Even though the SDGs aim at universal solutions, in most frameworks of policies within a given country, local knowledge systems are not exploited at the national level. This has resulted in a gap that has caused a low response rate between national strategies and the actual needs and circumstances of the local communities. According to the studies of Chavez-Miguel et al., (2022) and Ngo and Creutz (2022), these gaps should be addressed by focusing more on the concept of multi-level governance and co-production of knowledge to achieve the goals of SDGs in the most beneficial manner (Armitage, 2005).

The literature review shows the prevailing knowledge on the integration of community-based knowledge in sustainability policies, and this offers a platform for the study. The research is going to build on the already existing research by providing some new conceptual and empirical understanding of how national strategies can more effectively incorporate the local systems of knowledge and elucidate the impediments, facilitators, and gaps in policies that shape such an undertaking. This will help bridge the gap in knowledge integration and enhance more inclusive and context-specific implementation of SDGs (Azwar et al., 2023).

III. Theoretical Framework

The section discusses the theoretical and conceptual perspectives of how one can comprehend and analyze how one can integrate the knowledge systems in communities into national strategies to achieve sustainability. The following frameworks provide a platform on which the role of community knowledge in improving policy relevance, policy legitimacy, and policy sustainability results is comprehended.

The theory of collaborative governance dwells upon the mechanisms within which several actors (which can be individuals in various sectors, e.g., government, communities, NGOs, and the private sector) unite to make decisions and address common issues. The framework applies to the analysis of the role of community knowledge in the national strategies, as it concludes that the inclusion of community knowledge in national strategy requires the use of inclusive decision-making processes that encompass all the interested parties. Collaborative governance is the assurance of the inclusion of the community-based expertise, not only as well as its practical utilization at different levels, local, regional, and national. This multi-scalar process is used to ensure that the knowledge systems of local contexts, based on a particular cultural and environmental experience, are absorbed into the bigger and more national policy structures, promoting more context-sensitive and successful sustainability strategies. This theory emphasizes the role of community knowledge in increasing the legitimacy and acceptability of policy outcomes that will be achieved through the participation of all stakeholders in an equal manner. Sharing knowledge between community members and policymakers enhances understanding and trust between the two, thus improving the quality of the entire process of decision-making.

The models of knowledge co-production are based on the interaction between scientific knowledge and community-based knowledge, in particular. This model supports the reciprocation of both systems of knowledge, with the appreciation of the importance of the community experience and formal scientific investigation. The scientific and community knowledge systems are considered equal in the case of co-production models. This two-sided solution can be used to overcome the epistemological divide between the two knowledge communities to have a more holistic comprehension of complex sustainability challenges. It can also be used to develop more holistic and culturally sensitive policy solutions since it includes all different worldviews and methodologies. Co-production is more adaptive and sustainable because it takes into consideration and uses community knowledge in parallel with scientific research. It is in the circumstances of complex socio-environmental problems where local knowledge can provide insight into historical trends and traditional practices, which may not necessarily be reflected in scientific data alone.

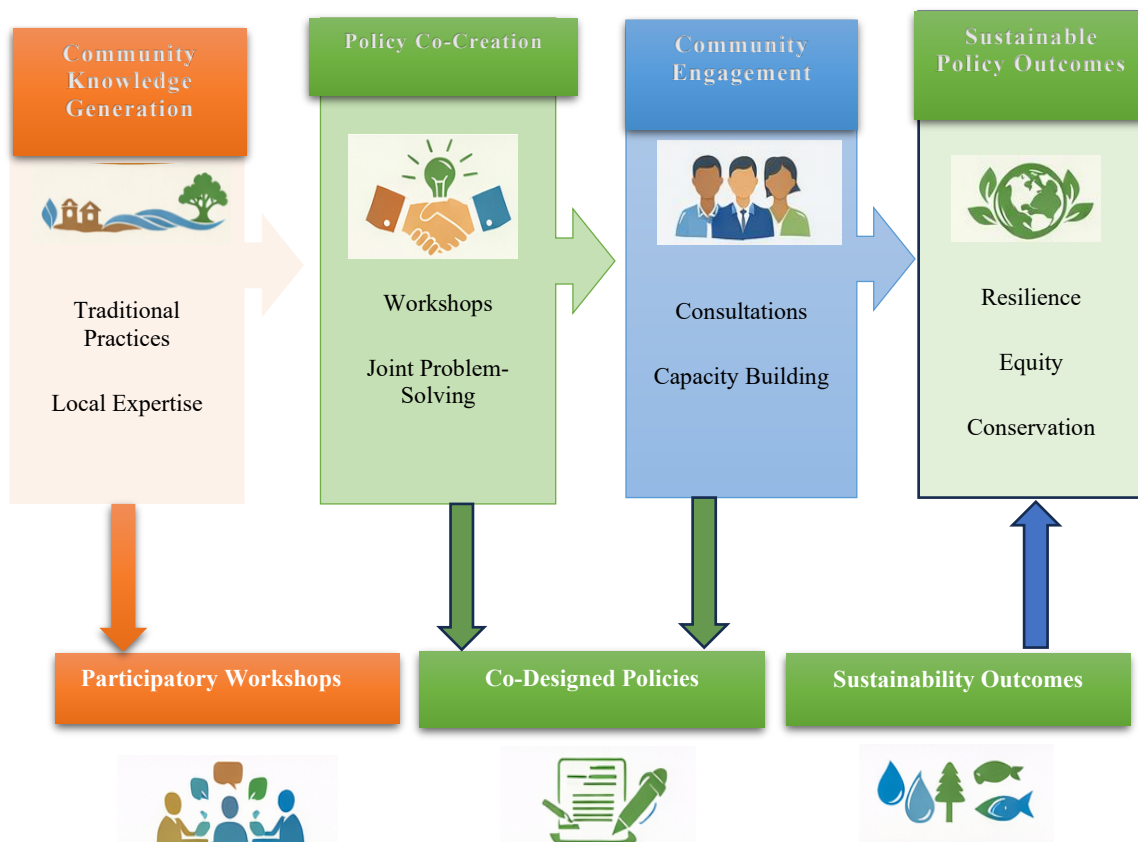


Figure 1: Pathways to Knowledge Co-Production

Figure 1 shows the steps of integrating community knowledge to the policymaking process. It starts with Community Knowledge Generation stage. This is then used in Policy Co-Creation where communities and policymakers come up with common solutions to the problems leading to co-designed policies. This is then succeeded by Community Engagement where the local input is used to shape the strategies through consultation and capacity building. The last section is Sustainable Policy Outcomes, which is the end outcome of the resilience, equity, and conservation goal.

Policy coherence is defined as the correlation and synchronization of various areas and levels of governance policies to make national strategies effective, efficient, and sustainable. The SDG implementation policy coherence framework assists in ensuring that the community knowledge is integrated in a manner that does not override the larger national strategies, and is in line with the objectives of the 2030 Agenda on Sustainable Development. The coherence frameworks on policies assume that

national policies should be sensitive to the local context and local knowledge in the delivery of the SDGs. By incorporating community knowledge into policy structures, the relevance of the policy structure is enhanced as it aligns national strategies more closely with local realities and needs, thereby increasing the effectiveness of the policy structure in reducing poverty, environmental sustainability, and social equity. Knowledge related to the community should be integrated, and this will need the alignment of different policy areas, including environmental governance, health, and education. Policy coherence frameworks are a roadmap towards the effectiveness of various sectors collaborating to produce synergies that enable them to achieve more sensible outcomes in sustainable ways. With the utilization of the community knowledge, the national strategies will be better placed to attain SDGs in a culturally and contextually relevant way.

IV. Methodology

This section explains the research design and how the community-based knowledge systems can be integrated into the national strategies to improve global sustainability. The approach will be based on qualitative case studies, a policy analysis, and participatory techniques to achieve a complete picture corresponding to the challenges and opportunities of community knowledge integration.

Research Design

The study uses a qualitative design to understand the incorporation of community-based knowledge in national policies towards the attainment of Sustainable Development Goals (SDGs). Such a design has a chance to investigate both contextual and subjective details, such as the perception, valuation, and deployment of local knowledge, as perceived by policymakers and communities.

Common Methodologies

Qualitative Case Studies of individual national approaches that have tried to incorporate community-based knowledge systems. The case studies provide an opportunity to review in detail the process of the integration, the agents involved, and the outcomes obtained. Countries or regions where a community-based natural resource management system, Indigenous knowledge, or other local systems of knowledge have been integrated into national policies on sustainability can be used as case studies. An in-depth policy review is undertaken through national SDG plans, policy documents, and government reports to determine how the community-based knowledge is reflected or not reflected in the national strategies. This Discussion looks at how community learning correlates with SDG ambitions in the different policy areas, e.g., climate action, biodiversity protection, and social equity.

Two crucial groups will be interviewed through semi-structured interviews and focus group discussions: community knowledge holders and policymakers and practitioners.

1. Indigenous leaders, local farmers, environmental activists, and other community members who have profound knowledge of local ecology and sustainable activities.
2. NGOs, national and local governments, in the design and implementation of SDG policies.

Such interviews and conversations will cover the perceptions of community knowledge, its application to the policy, and the difficulties arising during the process.

Figure 2 shows the functions of four major groups in incorporating knowledge in the community into national policies. Development of policies, funds, and regulatory frameworks is done by government agencies. NGOs are volunteers who offer grassroots support, capacity-building, and advocacy. Community leaders not only provide a local knowledge base but also mobilize local communities and assist in capacity-building. The global advocacy, global resources, and research provided by international organizations make partnerships possible. The overlapping of the diagram corresponds to the collaboration of these stakeholders to ensure the knowledge co-creation, inclusive policies, and sustainable outcomes. Community-based efforts are realized through their efforts, thus, effective integration of community knowledge in policy development.

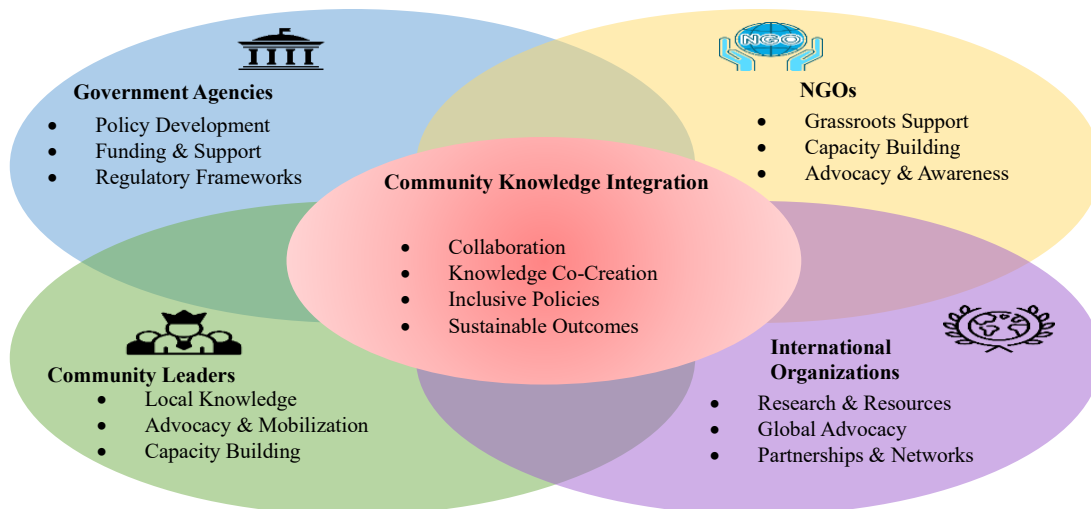


Figure 2: Stakeholders in Community Knowledge Integration

Participatory mapping and workshops will be used to involve the communities in the research. These ways permit the co-production of local knowledge with scientific knowledge, and they can directly influence policy recommendations. The workshops will be devoted to management of resources, adapting to climate, and other sustainability-related issues, and the participants will share their traditional practices and ways of how they could be applicable to the existing national policies.

Data Sources

Primary Data

- They will be collected by the use of in-depth interviews and focus groups of the key stakeholders in both the local communities and policy sectors.
- Participatory workshops with communities contributing to mapping exercises by sharing their knowledge will be collected.

Secondary Data

- Documents of government agencies, international agencies, and non-governmental organizations will be examined to gain an idea of how the knowledge held by communities has been incorporated into national SDG frameworks.
- The literature on community-based knowledge, SDGs, and policy integration will be relevant and will be reviewed to put the findings into perspective.

Analytical Approach

The thematic analysis approach of data analysis will be used to determine the recurrent themes, patterns, and associations between knowledge of communities and national policies. Key steps include:

1. The first data will be collected through interviews, focus groups, and documents, which will be coded to identify specific themes connected to the process of knowledge related to the community being incorporated into policy structures.
2. Key concepts that will be used in developing the themes will be epistemological differences, policy gaps, barriers to integration, and community empowerment.
3. The various case studies, as well as regions, will be compared in order to know what factors facilitate or obstruct effective integration of community knowledge.

4. According to the analysis, there will be a framework developed that will present the conditions needed to incorporate the community knowledge into the SDG policies.

V.Results

The results section is an illustration of the findings of the study that dwells on how community-based knowledge systems have been incorporated into national strategies in achieving the Sustainable Development Goals (SDGs). The results are divided into sub-sections that discuss different parts of the process of integration, such as indications of integration, issues, advantages, and the role of institutions and stakeholders. Where appropriate, illustrative tables and examples have been given to provide better clarity and presentation of the data.

Community knowledge has been noted to be integrated into national SDG policies in a number of case studies. The national environmental policies have incorporated the local resource management practices primarily in the management of natural resources, including water, biodiversity, and land. Such integration is an indication of the appreciation of the worth of community-based practices in the sustainability of these resources. Also, climate adaptation policies have recognized traditional ecological knowledge (TEK), and the local practices, such as agroforestry and sustainable farming, have become formalized at the national level. The practices are based on the centuries-old experience of the communities and add to more resilient agricultural systems and climate response methodologies. Moreover, the Indigenous knowledge systems have been integrated into the biodiversity conservation programs by working in partnership with the Indigenous communities and national agencies, thus making sure that the policies of conservation are scientifically wise and culturally sensitive. This partnership explains the application and appreciation of local knowledge in the quest for sustainable development and environmental management.

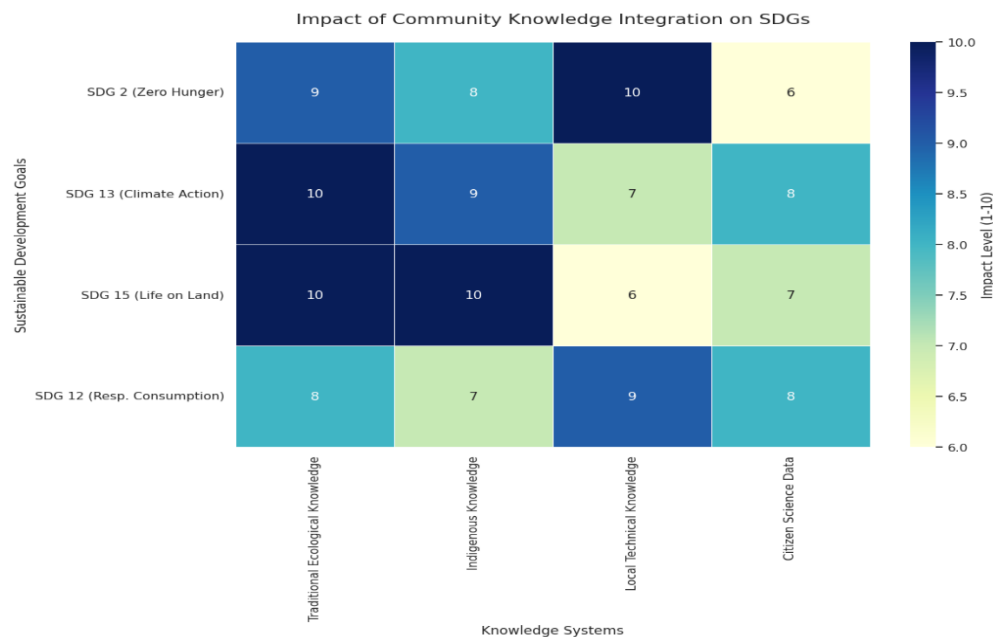


Figure 3: Impact of Community Knowledge Integration on SDGs

Figure 3 is a heatmap that demonstrates the level of impact of the various knowledge systems on the different Sustainable Development Goals (SDGs). One of the knowledge systems is Traditional Ecological Knowledge, another is Indigenous knowledge, another is Local Technical Knowledge, and another is Citizen Science Data. The color scale is used to identify the level of impact, with the numbers ranging between 6.0 and 10.0, and the darker the color, the higher the effect. The heatmap brings out the diverse implications of the different knowledge systems on the SDGs, with SDG 15 (Life on Land) getting impacted the most by most of the knowledge systems.

Table 1: Evidence of Community Knowledge Integration in Policies

Country/Region	Knowledge Integrated	SDG Focus Area	Policy Outcome
Indonesia	Indigenous forest management knowledge	Life on Land (SDG 15)	Improved forest conservation and reduced deforestation
Canada	Traditional ecological knowledge	Climate Action (SDG 13)	Strengthened climate resilience strategies
Kenya	Local agricultural practices	Zero Hunger (SDG 2)	Enhanced food security through sustainable agriculture
Peru	Indigenous agricultural knowledge	Responsible Consumption (SDG 12)	Promoted sustainable farming methods in national policies

Table 1 provides an idea of the ways community knowledge has been incorporated into national policies in different countries and regions. It identifies the knowledge systems that are being integrated, the focus areas of SDGs involved, and the resultant policy actions, showing how such integrations have a positive effect on sustainability and development.

While positive integration can be witnessed, several challenges continue to hinder the proper application of community knowledge systems in national policies. A significant issue is epistemological barriers, where there has been misunderstanding and resistance on both sides of the policymakers and the scientific community, as a result of differences in scientific knowledge and community knowledge. Also, there is institutional resistance, as sometimes the government institutions are not eager to digest local expertise because of the perceived inability to achieve scientific rigor and standardization. The absence of legal and governance systems to safeguard Indigenous knowledge and traditional practices also adds to the integration problem because the issue of intellectual property rights and the misuse of the knowledge is not fully tackled. Lastly, a significant obstacle is capacity and resource constraints, since in most cases, financial and technical resources are limited and thus cannot engage with communities and institutionalize their knowledge into policy processes meaningfully. The challenges should be overcome to achieve a successful integration of knowledge within the community to the national strategies of sustainable development.

Table 2: Challenges in Integration of Community Knowledge

Challenge	Description	Impact on Policy Integration
Epistemological Differences	Conflicting worldviews between scientific and community knowledge systems	Reduced collaboration and understanding
Institutional Resistance	Reluctance to acknowledge local knowledge in policymaking	Delayed policy development and implementation
Legal Framework Gaps	Lack of legal protection for Indigenous knowledge	Risk of exploitation and misappropriation of knowledge
Resource Limitations	Insufficient funding and capacity to engage communities	Limited engagement and community involvement in policymaking

The following table 2 enumerates the major issues encountered during the implementation of the community knowledge in national policies, including epistemological disparities, institutional resistance, and legal loopholes, as well as resource constraints. It gives a good picture of the obstacles that obstruct successful integration, which must be overcome to achieve success in incorporating knowledge.

Various stakeholders are critical in incorporating the community knowledge into national SDG strategies. The government agencies, both national and local, have played a significant role in the development of the frameworks of policy that facilitate the incorporation of community knowledge. Such agencies have also enabled partnerships between leaders and policy makers within the community settings, thus making sure that the local knowledge is reflected in the national development plans. Non-governmental organizations (NGOs) are in the position of an intermediary between the communities and governments. They facilitate building capacity and advocacy, and assist in creating awareness on the importance of local knowledge and demand its consideration in policy making. The knowledge holders and community leaders,

including the Indigenous groups, have offered invaluable information and practices that are significant in that the policies are based on the local realities and in such a way that they are culturally relevant. Finally, the international institutions like the United Nations and the World Bank have been crucial, as they have been funding and offering technical support to enable the involvement of the community and the incorporation of the local knowledge into the wider policy structures. Such partnerships among various stakeholders are what make the difference in the integration of the knowledge of the community into the national policies on sustainable development.

Table 3: Roles of Institutions and Stakeholders

Stakeholder	Role in Knowledge Integration	Contribution to Policy Integration
Government Agencies	Create policy frameworks and integrate knowledge systems	Developed inclusive environmental and climate policies
NGOs	Facilitate communication between communities and policymakers	Supported capacity-building and advocacy for community knowledge
Community Leaders/Knowledge Holders	Provide local knowledge and contribute to policy development	Ensured policies reflect local realities and needs
International Organizations	Provide financial support and technical assistance	Funded research and implementation of community knowledge projects

In Table 3, the author explains the functions of the different stakeholders who can play a role in the process of integrating community knowledge in the national SDG strategies, such as government agencies, NGOs, community leaders, and international organizations. It outlines the role played by each stakeholder on enhancing collaboration, capacity-building and recognition of local knowledge during policy processes.

VI. Discussion

The research outcomes presented in this paper show that the inclusion of community-based knowledge systems in national SDG strategies is a critical phenomenon, which can bring achievable advantages, but which has its own obstacles. Relating these findings to larger theoretical and practical frameworks, one can get a better idea about constraints of the existing SDG implementation methods and the vast benefits that may be realized once local knowledge is involved.

The strategies formulated by national SDGs, as they are typically organized in most countries, are more oriented toward scientific knowledge and the top-down policy framework, which may disregard the importance of local knowledge systems. The strategy has caused a mismatch between national policies and the reality and needs of local communities. Without incorporating community knowledge, SDG strategies will lose all connection with the same population they are supposed to serve, and therefore, policies become ineffective and difficult to implement on the ground. The results of this paper show that local knowledge can be helpful because it is based on the community and may give more contextualized and dynamic policy responses. As an illustration, when integrated into national policies, the local resource management (LRM) practices have proved more effective in dealing with climate change adaptation and conservation of biodiversity, e.g., sustainable farming and agroforestry. Nevertheless, the lack of such systems of knowledge in policymaking may lead to the failure to take advantage of opportunities to develop context-specific solutions that are based on local realities.

Community knowledge can play a significant role in making SDG strategies more relevant to the policy since it would not only guarantee a scientifically sound policy but also a contextually good policy. The community knowledge will help in making the policy more inclusive, where the community stakeholders are actively involved in the decision-making process. This approach is bottom-up, and this enhances the legitimacy of policies, making them more likely to be adopted and put into practice by the communities. Besides, there is increased sustainability when there is community knowledge integration. The inclusion of tested and optimized practices that have been passed down through generations (traditional agricultural practices, resource conservation strategies, and methods of adapting to climatic change) would make the

policies more capable of dealing with the challenges over the long term. Specifically, this is essential in a world that is becoming more impacted by climate change, and in which adaptive and resilient practices are crucial in the achievement of the SDGs.

To the policymakers, the community knowledge integration is a way of creating a feasible mechanism towards improving the effectiveness of implementing the SDGs. Policy makers must appreciate the merits of local knowledge and develop systems that will facilitate collaborative governance. This includes building relationships among communities, governments, and outside organizations that will ensure that the holders of local knowledge have a place at the policymaking table. To practitioners, the research highlights the significance of involving the community in the formulation and implementation of policies on sustainable development. The practitioners ought to focus on capacity-building and make sure that the participatory strategy, such as workshops and focus groups, is included in the process of policy formulation. In such a manner, they could promote more ownership of policies to local communities and enhance the chances of successful policy implementation.

The findings of this study are similar to those that have been obtained in previous studies, which underline the necessity of the co-production of knowledge between scientific and community-based knowledge. Similar studies have been used to prove the effectiveness of the climate change adaptation strategy and the conservation of biodiversity, such as Niu et al. (2023) and Yanou et al. (2023), among others, which have also confirmed that collaborative governance and knowledge integration can improve the success rate of biodiversity conservation and climate change management. Such studies also emphasize that institutional resistance and epistemological differences remain a barrier to the effective integration of knowledge of communities into national strategies. Nonetheless, this study is an addition to the current literature because it allows for the development of a framework for cognizing the particular advantages of knowledge integration in the community, like enhanced resiliency and sustainability rates, as well as cultural conservation. It further provides empirical data based on case studies of successful integration of community knowledge into policy and how this type of integration can result in more inclusive, effective, and culturally sensitive policy.

VII. Conclusion

This article analyzes the ability to integrate community-based knowledge systems into the national policies to realize the Sustainable Development Goals. The results indicate that community knowledge presents powerful platforms to enhance policy relevance, inclusiveness, and long-term sustainability but a number of obstacles limit its application. The challenges that are critical are the epistemological differences between scientific and local knowledge, institutional resistance, and a lack of the existence of formal legal frameworks that safeguard and acknowledge community knowledge systems. Such findings are very important in SDG implementation, since policies made/designed without the contributions of the locals usually end up not reflecting the on-the-ground reality, and priority needs of the locals to whom they are supposed to be serving. Incorporating community knowledge can make national strategies more context-sensitive, adaptable and effective, and result in more sustainable sustainability impacts. Policies that are more integrated also increase policy legitimacy by increasing a sense of community ownership and involving local stakeholders actively in the sustainable development processes.

The research adds to the sustainability research by providing new understanding of the role of collaborative governance and knowledge co-production in the implementation of SDG. It gives both theoretical and practical grounds that underpin the view of local knowledge as a strategic resource that policymakers and practitioners should use in the direction of the SDGs. Nonetheless, the research has a weakness, given that the case studies are limited in that they are locally geographically limited and cannot be immediately extended to other nations or areas. Further, the stated barriers to integration, especially the institutional resistance and legal limitations, should be researched further. In the future, the policy frameworks that help to systematically tackle these issues and allow integrating the knowledge of communities on a national scale should be developed. The evidence base would also be enhanced by

quantitative assessment of the long-term sustainability outcomes. In general, the community knowledge must not be perceived as a luxury, but rather a crucial part of an inclusive, context-sensitive, and sustainable SDG approach to future.

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