

*Proceeding from the 12th Focal Point Forum
of the Nairobi work programme*

Diversifying economic activity as an adaption strategy

**COP 24, Katowice, Poland
5 December, 18:30–21:00**



SUMMARY AND KEY MESSAGES

The 12th Focal Point Forum of the Nairobi work programme, organized in Katowice, Poland in conjunction with SBSTA, convened Parties and non-Party stakeholders for a learning session on how diversifying economic and livelihood activities from the national to the household level can reduce the impacts of climate change while supporting broader development. Participants shared relevant examples of economic diversification and offered insights on current and future opportunities as well as lesson learned.

The Focal Point Forum identified several key principles for economic diversification. Through the presentations and discussions, participants noted that economic diversification is more effective when it is:

- Anchored in scientific information (including information related to climate variability and change) to assess needs and to explore the most appropriate economic diversification options/approach;
- Supported by enabling environments that allow communities to pilot, replicate, sustain and scale-up approaches to economic diversification;
- Community-centred, owned, driven and managed;
- Driven by people's receptiveness to change and their willingness to invest;
- Built upon local knowledge and experience, as well as an understanding of market needs and options;
- Designed to allow both new and existing partnerships to evolve;
- Supported by outside-the-box thinking, combined with market and technological innovation;
- Underpinned by a holistic and integrated risk management approach;
- Applied across different timescales.

PROCEEDINGS

I. Mandate

- 1) Parties to the United Nations Framework Convention on Climate Change have long recognized the value of economic diversification, including it as a sub-theme of the Nairobi work programme on impacts, vulnerability, and adaptation to climate change in 2005. According to this mandate, the Nairobi work programme aims to promote the understanding of economic diversification as well as the development and dissemination of related knowledge resources to assist all Parties, and in particular developing countries, to take informed adaptation action.¹
- 2) In May 2018 at its forty-eighth session, the Subsidiary Body for Scientific and Technological Advice (SBSTA) requested the UNFCCC secretariat, through the Nairobi work programme, to organize the 12th Focal Point Forum in conjunction with SBSTA 49 on the topic of economic diversification.^{2 3}

II. Outcomes

- 3) The Focal Point Forum achieved the planned objectives: (1) participants gained a shared understanding of the challenges and opportunities for using economic diversification as an adaptation measure at different levels, including livelihood diversification; (2) it initiated a dialogue between Parties, organizations and individual experts interested in collaborating to address specific needs related to adaptation and economic diversification; and (3) it provided an opportunity for participants to express interest in undertaking actions based on the needs that arise in the discussions.

III. Agenda

- 4) Annela Anger-Kraavi, Vice Chair of the SBSTA, delivered opening remarks. Next, the facilitator for the evening, Donna Lagdameo, Red Cross Red Crescent Climate Centre provided a general introduction. The rest of the meeting was organized in two parts (see annex).
- 5) In the first part, the facilitator provided an overview of the topic and some key principles of economic diversification as an adaptation strategy, illustrated by case stories from five experts: Vositha Wijenayake (Expert committee on climate change adaptation, Sri Lanka), Caroline Prolo (Stocche Forbes, Brazil), Johanna Nalau (Griffith University, Australia), Giovanni Calderón (Sustainability and Climate Change Agency, Chile) and Daniel Ramos (World Trade Organization).
- 6) In the second part, participants divided into focus groups to discuss some key themes in more detail. The groups were led by four experts:
 - Group A: Scott Hook (Pacific Islands Forum secretariat): Understanding economic diversification. What are the biggest myths on economic diversification?
 - Group B: Alysha Bagasra (New Zealand Ministry of Foreign Affairs and Trade): National policy interventions. What concrete question or problem regarding economic diversification does your country have that would benefit from an exchange of experiences with others?

¹ FCCC/CP/2005/5/Add.1.

² FCCC/SBSTA/2018/4, para. 23

³ For more information, visit <https://unfccc.int/event/12th-focal-point-forum-of-the-nairobi-work-programme>

- Group C: Davinah Milenge-Uwella (African Development Bank): Financing economic diversification. What interventions have the highest impact for the lowest investment?
- Group D: Horacio Caperan (Massachusetts Institute of Technology (MIT)): Economic diversification in the future. What are commonly overlooked opportunities and challenges?

7) Participants reported the main findings from their groups back to the plenary.

IV. Welcome and framing remarks

- 8) The facilitator explained the purpose of the Forum by emphasizing that participants would be invited to talk about economic diversification within a learning context and to seek the different opportunities it can bring from national to household levels.
- 9) The Vice Chair of the SBSTA welcomed the coordinated approach taken in organizing this event and an event that had taken place the day before, looking at economic diversification through a mitigation lens. She stressed that it is only possible to get a full picture by looking at a topic from different angles.
- 10) She framed the discussion by pointing out that across the world, countries and people aspire towards climate-resilient sustainable development. However, climate impacts and risks get in the way. They threaten to keep many from that better future. Many national economies are driven by sectors and livelihoods that deliver essential functions for society, and which are highly vulnerable to the impacts of climate change. This places the well-being of communities, and current and future development gains at risk. This is especially true for developing countries. The Nairobi work programme understands this challenge and, together with over 360 partners from expert adaptation organizations, is helping countries to scale up adaptation in ways that foster this promising future.
- 11) The Nairobi work programme has been a key item on the adaptation agenda of the SBSTA for many years. It has already gathered adaptation knowledge about economic diversification. Economic diversification is a tool that can be used to increase the resilience of society to the impacts and risks of climate change. It involves finding new ways to deliver essential societal functions in the face of climate change. Through diversification, key societal functions may be carried out in new ways. Economic diversification provides the opportunity to explore new ways for societies to source and utilize food, ensure safety, strengthen social cohesion and sense of belonging, facilitate peace and health, to name just a few.
- 12) The Focal Point Forum was designed to explore economic diversification as one approach to pre-empt, plan for and put appropriate adaptation measures into place to address these climate risks. The main goal for the meeting was to contribute towards unpacking the possibilities that diversification offers, proving that it can be a hands-on tool for everybody.

V. Overview of the topic and examples of economic diversification

- 13) The first part of the forum examined economic diversification from different angles and used case stories to show that it is not an abstract concept but something tangible that is already helping to change lives at different levels. The facilitator provided a narrative of how economic diversification can be an opportunity to make the lives of coastal communities easier. This narrative featured throughout the evening:

Coastal and island communities in the Philippines have very high exposure to climate and disaster risks. Their vulnerability is compounded by their isolation – there is poor access by road or waterway, and limited communications infrastructure. Dependence on fishing for food and income is the norm in these communities. Over-exploitation of the seas and forests means that food, water and incomes suffer and result in increased poverty and malnutrition for communities that depend on their natural resources. Climate change has also resulted in unpredictable weather patterns and increased temperatures, leading the fish to move to deeper and cooler waters. Fishing time was previously between 4am and 10am, but must now stop earlier owing to the heat, and on many days the fishermen are unable to go to sea at all. This causes significant loss of income for fishermen and their families.

To compensate, the communities learned the craft of basket weaving using pandan leaves, and plant vegetables and other crops. The weavers protect and replant the pandan plants, which grow naturally in coastal areas and can securely hold the sand and soil along the coast. This protects the beach from erosion and prevents waves from travelling too high up the beach to the areas where people live. As part of the tribal community, the weavers did not have any formal training and their products did not make it to the capital. Thus, government intervention was deemed useful and three national government ministries came together – the ministries for trade and industry, social welfare and development, and the national commission for indigenous people – to help these communities develop their craft as a sustainable ecosystem-based enterprise. The government provided support in all stages of the production chain. With enabling local policies in place and joint memorandum circulars, the previously additional source of income became a sustainable option for the communities.

- 14) Vositha Wijenayake, a member of the expert committee on climate change adaptation, Sri Lanka, shared a case story:

In Sri Lanka, a capacity-building project for women was developed to help combat droughts in paddy cultivation. Regional leaders were first identified to act as guides on local needs and values. Home gardening was identified as useful and available to the local population. A small grant scheme allowed funds to be given to women farmers who partnered with youth leaders and farmer organizations. The product that was farmed (peanuts) was originally meant for sale, but the women realized it was ideal for home consumption, which was a successful diversification of traditional food. Some opted out of the suggested peanut farming because the original request was for ginger, which shows that diversification needs to be planned in accordance with the wishes of the population. The farmers are now using climate models and forecasts to deal with drought, not restarting the project until rains are returning. This highlights the importance of science and risk analysis in successful diversification. Organic production was an additional opportunity.

- 15) Caroline Prolo, a representative from the legal enterprise Stocche Forbes, discussed a legal aspect of economic diversification:

Drought in Brazil negatively impacts the energy sector, which is dominated by hydropower. Water scarcity in river basins presents emerging opportunities for renewables and development in other, historically poor parts of the country. Contrary to the experience in developed countries where wind and solar projects often have trouble gaining support of local communities, in Brazil the community has embraced renewables as a way to access economic development and financial resources for historically vulnerable and poor demographics. They are empowered to use the region's natural assets (wind, sun) for economic gain.

A recent energy security plan included flexibility in environmental licensing for the project but failed because there was no creative guidance for law enforcement professionals. This causes burdensome and lengthy processes for approval with high transaction costs, making it unattractive for investment to be placed in these projects. This shows that when it comes to economic diversification, laws can make all the difference for better or worse. To facilitate climate change adaptation and mitigation, governments should ensure laws are sufficiently flexible to allow for projects that work in a particular local context. Further, governments may need to provide different regulations for renewable energy to facilitate the implementation of their climate action commitments.

- 16) Johanna Nalau from Griffith University, Australia, illustrated how tourism can be a useful mechanism of economic diversification when done in a responsible and sustainable way. As an example, she shared a case story on the role of sustainable and eco-tourism in economic diversification in Vanuatu and other Pacific islands:

In 2015, a category 5 cyclone hit Vanuatu in 2015. The country's economy was dependent on cruise ships, which cancelled their visits for two months following the cyclone. Most houses and the airport were destroyed and people in urban areas whose livelihoods were dependent on tourism suffered large economic losses. The mass tourism they had built their economy around was not sustainable and did not benefit many people. As a result, local communities became more interested in alternative forms of tourism, such as eco-tourism.

Eco-tourism is not capital intensive and can be managed locally, integrating local knowledge from the very beginning to maximize the value chain. A case study in Southern Vanuatu showed that there was greater interest – especially among women – in diversifying towards small eco-tours. Women often look after the family and have the capacity to lead ad hoc, small-scale tourism activities so, rather than advising women to abandon other means of income, it is good practice to encourage an integrated approach to balance income generation. Lessons learned are that tourism as an adaptation strategy works when it is combined with other approaches, and that community-based action plans are helpful tools towards that end. Having a policy framework that encourages capacity-building activities and provides information to tourists on local culture and lifestyle can help communities to benefit from tourism.

- 17) Giovanni Calderón from the Chilean Agency for Sustainability and Climate Change highlighted examples of policy interventions on economic diversification in Chile:

Chile's forest is largely used for logging and fuel. For many years, the forest was overutilized for forest plantations, which led to forest fires and overgrazing. Community members also used the forest for firewood and soil. The need to strengthen Chile's path towards sustainable development was noted, so a clean production agreement relating to the management of Chile's native forest was elaborated. This agreement includes a plan to combat desertification in the central regions of Chile, to address the adverse impacts of climate change and unsustainable community interventions. The plan also includes provision for owners to cultivate commercial produce with greater added value than under previous practices, fostering new economic activities that incentivize efficient use of the environment to promote conservation. The goal of the agreement is to find complete solutions for complete conservation and a sustainable use of the forest for both the public and private sectors. The intended outcome is to reduce desertification, improve efficient use of water, and preserve biodiversity and soil quality.

- 18) Lastly, Daniel Ramos, a delegate from the World Trade Organization, put a lens on emerging areas for economic diversification:

For traditional economic activity to work, actors need access to hard infrastructure (roads, ships, etc.) leading to substantial border and transportation costs. Many target markets for exports from developing countries are far away from the location of production. The World Trade Organization works to address increasing supply chain vulnerability, including by mitigating trade choke points that are vulnerable to rising sea levels and extreme weather events. This allows developing countries to take advantage of opportunities in emerging markets.

The ‘Internet of things’, artificial intelligence and 3D printing also present new opportunities. As e-commerce can entail transactions with a high economic value, distributed ledger (blockchain) technology can be used to derive improved security and reduce costs by eliminating intermediaries in cross-border trade. Likewise, 3D printing allows women in Africa to develop and access their own agricultural tools. While embracing these technologies opens up opportunities, this also requires a new set of trade infrastructure.

- 19) The general discussion triggered the question of what kind of economic courage is needed to diversify, keeping in mind the delayed profits and potentially large up-front costs. Participants noted that diversification makes economic sense because technology can provide cost-effective solutions, such as in Brazil. Further, when thinking about how to shift from carbon-intensive models with high social costs (i.e. associated with hydropower, such as implementation in indigenous territory), adaptation and diversification need to be accompanied with cost-competitive solar and wind technology.
- 20) Participants also noted that communities are often innovative, and many have started some of their own enterprises, for example in eco-tourism. Research institutions have large roles to play in the process to help communities to consider the range of different sustainable projects they could undertake.
- 21) The issue arose of how to deal with generational and demographic divides in the implementation of economic diversification policies. At a minimum, context is required and the willingness of people to change must be tested and stimulated. Diversification will not succeed without receptiveness to change.
- 22) On the role of women and gender constituencies in advancing climate action in cases of economic diversification, it was noted that cultivation of informal decision-making by women gives women control of money in some places. Clarity is required on the decision-making structure in the community. In many local contexts, men are in leadership positions, but women play a key investment role in households.

VI. Discussions in breakout groups

Group A: Understanding economic diversification. What are the biggest myths on economic diversification?

- 23) The group facilitator, Scott Hook, framed the discussion by referring to the Pacific region, which is a large and dynamic area that is frequently mistaken for being empty. Economic diversification is a very important conversation in the region. He posited that unpacking the biggest myths on economic diversification is about finding clear definitions. It is important to analyse why economic diversification should be pursued, and why it is

difficult, especially for countries in the Pacific, or landlocked countries, which are not well connected with global markets.

- 24) Participants suggested that significant changes in economic activities have been common for most people in most regions. There is good knowledge available on where and why that diversification has been successful. The new component is climate change.
- 25) Economic diversification is closely linked to global markets and climate change. This not only refers to rural areas in the global south, but also to the global north, including cities. Examples are not always positive, especially when it comes to responding to economic pressures, contributing to carbon emissions, and large-scale economic restructuring that can lead to unemployment and migration.
- 26) Economic diversification as a concept is not limited to a formal national narrative but also includes household diversification strategies, which can include migration.
- 27) Participants considered a main driver of economic diversification to be the expectation that quality of life will improve. In societies where communities' current activity has a very high efficiency and good return on investment, and/or when the society is a closed society with limited connectivity with other societies, then it becomes very difficult to diversify.
- 28) Diversification is not only about changing one job for another, it can be more holistic. . Lifestyles can be re-purposed and entirely changed. For example, after the decline of the auto industry in Detroit, some auto workers turned from car manufacturing to urban farming. An underlying success factor might be asking questions about how communities and people organize their lives. In some cases, economic diversification may not necessarily lead to economic benefits, but could provide other benefits, such as access to healthier food.
- 29) Conventional farming typically produces one crop for economies of scale; however, understanding what the customer wants can lead to crop diversification. In Kenya, for example, an important factor to promote economic diversification is learning from others. Small farmers traditionally engaged in monoculture may not be familiar with diversification, but information on diversification from neighbouring communities and the overall market may stimulate them to follow suit.
- 30) A similar case has been reported from the Netherlands, where monoculture cheese production has been diversified to also embrace tourism, including bicycling tourism, centred around the cheese industry. This improves awareness of people living there, their values and the related ecosystem.
- 31) Overall, participants in group A considered that it is important to emphasize success stories and scientific information.

Group B: National policy interventions. What concrete question or problem regarding economic diversification does your country have that would benefit from an exchange of experiences with others? What lessons can you draw from personal experience to indicate areas where economic diversification policy interventions have worked well or not?

- 32) The opening case story by the group facilitator, Alysha Bagasra, was an example from New Zealand. New Zealand's vineyards historically use Sauvignon Blanc grapes. However, research has revealed that climate change alters which grapes can be optimally supported by the local climate. As a result, the government commissioned research and

modelling from universities for over fifty climate scenarios to understand which varieties will thrive under projected conditions, so that vineyards can switch over to more climate-resilient varieties and harness the potential for economic gain.

- 33) In another region in New Zealand (Southland), the economy is heavily reliant on sheep and beef. To diversify away from meat, the Southland regional government has been exploring with the private sector the potential to establish a space programme in order to capitalize on another asset of the region – its dark sky (near Antarctica).
- 34) Lastly, New Zealand's energy sector fuel mix is dominated by hydroelectricity. Oil and gas are often the most convenient substitutes when hydropower is decommissioned. This led to New Zealand's collaboration with Japan over hybrid energy and renewables, and a memorandum of understanding between two national governments to allow private sectors to engage.
- 35) The ensuing discussion included issues such as whether governments really act differently on economic diversification in a climate change context compared with other contexts. An aspect to consider is the need to recognize the unequal knowledge of what is going to happen: only some communities have the capacity to know how to respond and tailor diversification strategies to meet the expected impacts of climate change. Therefore, there is a need to identify vulnerable groups and target policies to meet their needs.
- 36) Participants pointed to a need for capacity-building to familiarize actors with concepts and available policy tools, and a need to shift focus from financial benefits to community benefits.
- 37) They also noted that there are existing economic diversification actions that are simply not being reported or identified as economic diversification.
- 38) Development of provincial adaptation plans, wherein national policy flows down into regional and district policies with implementation, is good practice.
- 39) A systems/holistic approach is also valuable to inform multi-sectoral policy interventions. For example, Chile has many small-scale fisheries harvesting clams, but the changing climate has an impact on water management practices, causing clams to die. This example highlights a need to study not only climate factors but also ecosystems as well as human factors and human capacity.
- 40) Policy can guide the sharing of resources and improved land rights. In Togo, a policy allowed farmers to feel safe enough to invest in their farms. Without this, farmers do not have the means to make decisions on their lands. It is helpful to improve legal and institutional certainty.
- 41) Participants of group B concluded that economic diversification creates a short-term signal of opportunity and this can effectively mobilize solutions against the long-term, slow onset of climate impacts.

Group C: Financing economic diversification. What interventions have the highest impact for the resources invested?

- 42) The group facilitator, Davinah Milenge-Uwella, opened the discussion by noting that most vulnerable communities in Africa are already adapting to the negative impacts of climate change in one way or another. A productive way forward is to capitalize on these existing

adaptation measures and scale up. Practitioners should identify activities that can be strengthened and supported for meaningful outcomes. Communities typically know what fits into their means and their markets, and so it is useful to examine the kinds of interventions that are in line with these and move forward from there.

- 43) In order to reduce costs during the design phase, community involvement can help to assess what is wanted, needed and what is feasible. The adaptive actions communities are already engaged in can be used as a baseline. It is often easier to foster ownership by building on existing actions rather than to implementing from the top down.
- 44) The three key areas identified by the group for maximizing investment were (1) access to capital; (2) education to strengthen communities and allow self-generated innovation; and (3) networking and having access to infrastructure.
- 45) Participants noted that women are often involved in transforming products but often do not have the capital to invest in the equipment that would allow them to transform the product in a more efficient way.
- 46) Water resources is an important topic as more places face water scarcity and there is a need to change infrastructure or agricultural production modes. In a transboundary context, navigating or creating markets can be even more complicated because of difficulties with existing tensions.
- 47) On the importance of education, it was noted that it is difficult to measure the impact of education within a short time period. However, teaching the basics of climate change, how to develop bankable solutions, and how to understand within communities what the different gaps are, can help to bolster adaptive capacity, particularly with respect to economic diversification. Education may be regarded as a comparatively low investment and can be very effective, keeping in mind that one well-trained person can train many others.

Group D: Economic diversification in the future. What are commonly overlooked opportunities and challenges?

- 48) The group facilitated by Horacio Caperan identified a set of drivers of economic diversification in the future, such as:
 - Survival (e.g. to compensate for lost income and food sources or livelihood options);
 - Basic Needs;
 - Identifying risks, including at the political and geographic levels;
 - Well-being;
 - Jobs;
 - Profit;
 - Need to anticipate the future to optimize well-being;
 - Impact of demographic growth.
- 49) A range of parameters need to be incorporated into decision-making, including economic development, climate and population growth. The question is how to take these into account, keeping in mind the related uncertainties.

- 50) Participants agreed that successful adaptation includes economic diversification. Finance, governance and technology were identified as the three pillars for successful economic diversification. However, the group noted that it is a challenge to get those pillars to work together.
- 51) Regarding the government level, it was noted that adaptation to climate change and economic diversification policies are fragmented among different ministries – ministries of agriculture, and finance, environment, and so on. Different ministries may have their own agendas and do not always collaborate well.
- 52) In terms of challenges, the current dependencies in certain resources or models may prevent people from embracing change. There is inertia in current practices but also fear of change. It is not easy to adapt cultural practices that are linked to certain crops or economic practices; cultural barriers and long-term practices can block change. Action must often be inspired. Taking advantage of people's inclination to experiment can be a way to help overcome this inertia.
- 53) Stronger political signals are also helpful to communicate potential benefits. For example, in Germany, many regions are not economically diversified. Phasing out coal would provide many benefits for communities in the long term, but would require stronger political signals.
- 54) Communication is key, and also a challenge. There is a need to communicate how changes are linked to climate change and the benefits of adaptation and diversification, not only the negative aspects. The information embedded in market signals does not always convey the necessary information. However, the market deals with this through experimentation – so some flexibility is required to allow people to come up with solutions to unprecedented cases.
- 55) There is a difference between the individual level and the community level. Communities have the possibility of people helping each other.
- 56) The group observed that there appears to be an overall assumption that the future is going to be the same, that globalization and neoliberalism will be the global paradigm. If it is not the same, what does that mean for economic diversity and what does it mean for how the local relates to the broader trends? As the future may look different, it is sensible to ensure that traditional and local economies are still flourishing.

VII. Next steps

- 57) The secretariat will disseminate the key findings of the forum and, building on these, facilitate a continued exchange to foster follow-up discussion and actions. This may lead to expressions of interest by participants to undertake actions based on the needs discussed in the meeting.

Annex: Focal Point Forum Agenda

18:30–18:50	Opening and welcome
	<p>Introduction to the Forum: Annela Anger-Kraavi, Vice Chair of the Subsidiary Body for Scientific and Technological Advice</p> <p>Facilitator: Donna Lagdameo, Red Cross Red Crescent Climate Centre</p>
18:50–20:00	Part I – Introduction to economic diversification as an adaptation strategy
	<p>The facilitator introduced key principles, policy interventions and emerging areas, illustrated by succinct case stories by experts:</p> <p>Vositha Wijenayake, Expert committee on climate change adaptation, Sri Lanka. Case story: <i>Crop diversification and capacity-building of women farmers for economic diversification-based adaptation measures</i></p> <p>Caroline Prolo, Stocche Forbes, Brazil. Case story: <i>The effects of drought and water scarcity on the operation of hydropower projects, thus requiring the diversification to other energy sources and infrastructure in Brazil</i></p> <p>Johanna Nalau, Griffith University, Australia. Case story: <i>The role of sustainable tourism in economic diversification</i></p> <p>Giovanni Calderón, Chilean Agency for Sustainability and Climate Change. Case story: <i>Sustainable forest management and policy interventions for economic diversification in Chile</i></p> <p>Daniel Ramos, World Trade Organization Case story: <i>Emerging areas for economic diversification now and in the future</i></p> <p>Discussion</p>
20:00–20:45	Part II – Expert introduction into key themes in focus groups
	<p>Group A. Facilitator: Scott Hook, Pacific Islands Forum Secretariat <i>Understanding economic diversification – What are the biggest myths on economic diversification?</i></p> <p>Group B. Facilitator: Alysha Bagasra, New Zealand Ministry of Foreign Affairs and National policy interventions – <i>What concrete question or problem regarding economic diversification does your country have that would benefit from an exchange of experiences with others?</i></p> <p>Group C. Facilitator: Davinah Milenge-Uwella, African Development Bank <i>Financing economic diversification – What interventions have the highest impact for the lowest investment?</i></p> <p>Group D. Facilitator: Horacio Caperan, Massachusetts Institute of Technology (MIT) <i>Economic diversification in the future – What are commonly overlooked opportunities and challenges?</i></p>
20:45–21:00	Plenary discussion and closing.