



NATIONAL WORKSHOP ON WILD EDIBLE MUSHROOMS

27–28 February 2025



Tabora – Tanzania

Isike Mwanakiyungi Hall



Full report

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Executive Summary

The National Workshop on Wild Edible Mushrooms, jointly organized by the Association for the Development of Protected Areas (ADAP), Tanzania Forestry Research Institute (TAFORI), and Adansonia-Consulting, was held on February 27-28, 2025, at Isike Mwanakiyungi Hall in Tabora Municipality. The workshop was attended by over 60 participants who were mushroom pickers, sellers, local authorities, government institutions, academics, experts, and other stakeholders. They came together to assess and discuss the potential of wild edible mushrooms, the challenges and the way forward for the development of a sustainable value chain for wild edible mushrooms which promotes both income-generating activities and better forest conservation.

The event was facilitated by Dr. Amani J. Uisso (TAFORI) and officially opened by the Sikonge District Commissioner, Hon. Colonel Magembe, on behalf of the Tabora Regional Commissioner (Hon. Paul Matiko Chacha), with Dr. Revocatus Mushumbushi (Director General - TAFORI) also in attendance. The workshop's discussions revolved around the value chain of wild edible mushroom, featuring key presentations on the importance of non-timber forest products (Dr. Numan Amanzi - TAFORI), the economic potential of wild mushrooms in conservation and income generation (Dr. Chelestino Balama - TAFORI), current research on wild mushrooms (Prof. Donatha Tibuhwa - UDSM), and regulatory frameworks impacting harvesting (Mr. Thomas Wambura – TFS, Mr. Jovine Nachihangu - TAWA).

ADAP's wild edible mushroom initiative in Katavi and Tabora regions were also highlighted, with Dr. Urs Bloesch (Adansonia-Consulting) and Mr. Jovin Lwehabura (ADAP) showcasing the organization's efforts in training mushroom pickers, installing solar dryers (with ADAP's support exceeding TZS 120 million), and improving harvesting and drying techniques. The participants confirmed the high socio-economic and ecological potential of wild edible mushrooms but identified the following challenges that hinder the growth of the sector:

- Low awareness of wild edible mushrooms which are plentiful in miombo woodland during rainy season (edibility, nutritious value, market potential).
- Current regulations that restrict mushroom harvesting in Game Reserves under TAWA and complicated procedures in Forest Reserves under TFS for harvesting mushrooms.
- Absence of a national strategy for non-wood forest products including wild edible mushrooms.
- Inappropriate processing of mushrooms (drying and packaging) and difficult access to the regional and national markets.
- Ongoing deforestation and illegal heavy grazing in forests that destroy mushrooms.



As **way forward**, the following recommendations were made:

- Creation of a **National Mushroom Forum**, a platform which promotes partnership amongst mushroom stakeholders, advocates for policy reforms, and promotes mushroom commercialization at local, regional, and national (international) markets. A core team was appointed to oversee the forum's formalization, comprising Prof. Donatha Tibuhwa (UDSM), Dr. Greyson Nyamoga (SUA), Dr. Revocatus Mushumbushi (TAFORI), and Romanus Mwakimata (ADAP).
- TFS is committing to ease the procedure of getting entry and harvesting permits of wild edible mushrooms for **forest reserves**.
- TAWA will consider mushroom picking in future management plans of **game reserves** for areas that are close to villages.
- TAFORI and other academia will engage in **more research** on wild edible mushrooms in order to disentangle the required information along the edible wild mushroom value chain.
- Local and regional administrations should **facilitate business** activities of mushroom pickers and sellers by facilitating the registration of associations and cooperatives and by offering loans for investments in material and infrastructure.

The workshop concluded with a strong commitment to developing a thriving and sustainable wild edible mushroom sector in Tanzania. Therefore, the pickers need to improve the quality of their products in order to certify them and target the retail markets. Through collaborative efforts, policy reforms, and market-driven innovations, stakeholders of the value chain aim to unlock the full economic and ecological potential of wild edible mushrooms, ensuring their sustainable utilization and long-term benefits for both community livelihoods and conservation efforts.

The workshop created a unique momentum to promote wild edible mushrooms. ADAP will continue to work in partnership with the Central and Local Governments, SIDO, TBS, TAFORI, SUA, UDSM, and others to facilitate the development of an added-value chain for wild edible mushrooms and to better link the different actors. ADAP, in collaboration with other key stakeholders, will further build the capacity of mushroom pickers and sellers based on regular monitoring.



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List of the Acronyms

ADAP	Association for the Development of the Protected Areas
FTI	Forestry Training Institute Olmotonyi
MNRT	Ministry of Natural Resources and Tourism
NTFP	Non-Timber Forest Product
NWFP	Non-Wood Forest Product
PO-RALG	President's Office – Regional Administration and Local Governments
SIDO	Small Industries Development Organization
SUA	Sokoine University of Agriculture
TAFORI	Tanzania Forestry Research Institute
TAWA	Tanzania Wildlife Authority
TBS	Tanzania Bureau of Standards
TFS	Tanzania Forest Services Agency
TZS	Tanzanian Shillings
UDSM	University of Dar es Salaam

Acknowledgments

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We extend our deepest gratitude to all participants for their active engagement and valuable contributions. Special recognition goes to Prof. Donatha Tibuhwa (UDSM), Dr. Greyson Z. Nyamoga (SUA), Dr. Emmanuela S. Massawe (SUA), Ms. Nandera Lolila (SUA), and Dr. Urs Bloesch for their expertise insights, as well as representatives from FBD (Forestry and Beekeeping Division). We also appreciate the Tanzania Forest Services Agency (TFS) and Tanzania Wildlife Authority (TAWA) Officers, including Mr. Thomas Wambura (TFS Western Zone) and Mr. Jovine Nachihangu (TAWA western zone), for their willingness to share their expertise and engage in in-depth discussions.

Furthermore, we are grateful to the Executive Directors of Sikonge and Mlele Districts, as well as the TFS District Forest Managers of Mlele and Sikonge, Mr. John Kallabaka and Mr. Eleuter Kibiki. We also appreciate the representatives from the Mlele, Sikonge, and Nsimbo District Councils. Additionally, we acknowledge Agness Joseph and David Fonga for their contributions through "Trees for Future". Their participation underscored the importance of multi-stakeholders' collaboration in strengthening the Tanzanian wild edible mushroom sector.

A special acknowledgment goes to the mushroom pickers' representative groups from Sikonge, Mlele, and Nsimbo districts, whose first-hand information and practical experiences provided valuable insights into harvesting practices and market challenges. Likewise, we appreciate the local sellers from Tabora Municipality and Sikonge Markets for sharing their perspectives on the commercialization of wild edible mushrooms.

We extend our sincere appreciation to Dr. Amani J. Uisso, the workshop facilitator, for his outstanding leadership in guiding the sessions with dedication and professionalism. We thank Abdala Lingiilie (ADAP), Dr Bloesch (Adansonia-Consulting), Sandy Mermud (ADAP), Elvis Jonas (national mushroom consultant), Nathalie Rochat (ADAP), Dr. Nymoga (SUA), Dr. Balama (TAFORI), Dr A. J. Uisso (TAFORI) and Frank Kweka (ADAP) for their contribution to this report.

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Together ADAP, TAFORI and Adansonia-Consulting would like to thank everyone who played a role, directly or indirectly, in making this workshop successful, and we are looking forward to future collaboration in advancing Tanzania's wild edible mushroom sector.

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1. Introduction

1.1. Organizers of the workshop

The Association for the Development of Protected Areas (ADAP) was established in 1997 in Switzerland and is dedicated to community-based natural resource management. As a member of the Geneva Federation for Cooperation and Development since 2001 and the International Union for Conservation of Nature since 2018, ADAP has played a vital role in community-based conservation efforts across various African regions, particularly in western Tanzania. Since the beginning of its work in Tanzania in 2001, ADAP has achieved significant milestones, including supporting the establishment of the Mlele Beekeeping Zone, capacity building for local beekeepers, and the training of village forest guards. In 2020, ADAP expanded its intervention to wild edible mushrooms, aiming to strengthen the mushroom value chain to improve local livelihoods and conservation of the Rungwa River and Mlele Hills Forest Reserves.

To achieve these goals, ADAP has partnered with Adansonia-Consulting, an international consulting firm based in Switzerland, to enhance sustainable resource management in Tanzania's miombo woodlands. Adansonia-Consulting brings specialized expertise that complements ADAP's community-based conservation initiatives, particularly in strengthening local capacities and promoting economic opportunities linked to wild edible mushrooms.

The Tanzania Forestry Research Institute (TAFORI) plays a leading role in scientific research on forest resources, including wild edible mushrooms as an important Non-Wood Forest Product (NWFP). With its extensive research expertise, TAFORI provides crucial support in developing sustainable harvesting practices, improving the mushroom value chain, and ensuring evidence-based conservation efforts.

Recognizing the need for coordinated action, ADAP, Adansonia Consulting, and TAFORI joined efforts to organize a national workshop in Tabora, bringing together policymakers, politicians, researchers, and other stakeholders, to discuss challenges and opportunities in the wild mushroom sector.

1.2. The first national workshop on wild edible mushrooms

The First National Workshop on Wild Edible Mushrooms, organized by TAFORI, ADAP, and Adansonia Consulting, was held on February 27-28, 2025, at Isike Mwanakiyungi Hall in Tabora Municipality. The workshop facilitated by Dr. Amani J. Uisso (TAFORI) and Hon. Colonel Magembe a Sikonge District Commissioner, was the guest of honor on behalf of the Tabora Regional Commissioner Hon. Paul Matiko Chacha.

Following the introductions, Sandy Mermod, Program Manager (ADAP), delivered opening remarks, expressing gratitude to all attendees and wishing that after the two-day workshop people will go back home with a better understanding of wild mushrooms and some measures to implement to address the challenges. The TAFORI Director General, Dr. Revocatus Mushumbusi then delivered his remarks, thanking ADAP for organizing the workshop and highlighting its role in strengthening the wild edible mushroom value chain. He emphasized the shift from purely conservation efforts to income generation for local communities and underscored the importance of research-driven strategies in supporting this transformation (Figure 1).



Figure 1: Sandy Mermod, ADAP Program Manager (Top left), and Dr. Revocatus Mushumbusi, Director General TAFORI (Top right) deliver opening remarks to the Guest of Honor and all participants, while attendees keenly listening to the presented topics.

The Guest of Honor, Colonel Magembe, the Sikonge DC, delivered the official opening speech, acknowledging TAFORI, ADAP, and Adansonia-Consulting for organizing the workshop. Hon. Magembe emphasized the need for greater collaboration amongst all stakeholder, the effective use of research findings, and alignment with Tanzania's Vision 2025 and National Strategy for Growth and Reduction of Poverty development strategies. Additionally, he highlighted the valuable mushroom species found in the Miombo woodlands of Tabora, including Wange, Kansolele, Uhima, Ulelema, and Umpalala. He warmly welcomed all participants to Tabora and encouraged fruitful discussions to strengthen the wild edible mushroom sector (Figure 2).



Figure 2: The Guest of Honor, Colonel Magembe, the Sikonge District Commissioner (top left), delivered the opening speech. Then, Mr. Elvis Jonas, the National Mushroom Consultant (top right) and the sellers (bottom left) briefed him on the various wild edible mushrooms species. Finally, he received dried mushrooms from ADAP (bottom right).

Following the Guest of Honor's speech, Dr. Amani J. Uisso (TAFORI) provided an overview of the workshop objectives, which included sharing experiences, evidences, opportunities, and challenges related to the wild edible mushroom value chain (see program in Annex 1) He then invited the Guest of Honor to visit the exhibition tables, which displayed a variety of fresh and dried mushroom species collected by pickers and sellers from Sikonge, Mlele District, Nsimbo District, and Tabora Municipality (Figure 2). As a token of appreciation, the Guest of Honor was presented with dried mushrooms, including Usikova, Wange, and Umpalala.

2. Presentations

2.1. Importance of NTFPs in Tanzanian forestry, presented by Dr. Numan S. Amanzi, TAFORI

Dr. Numan S. Amanzi delivered the first presentation, providing an overview of Non-Timber Forest Products (NTFPs), particularly emphasizing wild edible mushrooms. He highlighted the significance of NTFPs and their contribution to biodiversity conservation, livelihoods, and economic development. He also discussed key policies, acts, and regulations in Tanzania that support the promotion of wild edible mushrooms, including the National Forest Policy (1998) and the National Environmental Policy (2021). He stressed the urgency of developing a national strategy and action plan and called for collaboration among stakeholders, including the government, private sector, Universities and research institutions, to address this issue (Figure 3).



Figure 3: Dr. Numan S. Amanzi (TAFORI) presenting the importance and policy overview of NTFPs, including wild edible mushrooms; participants listening attentively to his presentation.

Discussion

Prof. Donatha Tibuhwa initiated the discussion by questioning whether charcoal and firewood are classified as NTFPs. Dr. Amanzi clarified that charcoal and firewood are considered as NTFPs, while these forest products are not considered in the Non-Wood Forest Products (NWFPs) as defined by Food and Agriculture Organization.



Figure 4: Prof. Donatha Tibuhwa (UDSM) and Dr. Greyson Nyamoga (SUA) asking questions following Dr. Numaz Amanzi's presentation.

Representatives from Sokoine University of Agriculture (SUA) expressed some concerns about the market challenges posed by poisonous mushrooms, which affect the trade of edible mushroom products. Addressing this, Dr. Numan Amanzi (TAFORI), with input from Prof. Donatha Tibuhwa (UDSM), emphasized the need for public awareness and education. She stated, *“The best way to address the issue of poisonous mushrooms is through awareness creation. We must combine indigenous knowledge with scientific research to help communities differentiate between edible and toxic mushrooms.”* Moreover Dr. Urs Bloesch (Adansonia-Consulting) explained that deadly poisonous mushrooms are not found in miombo woodlands, but they are present in plantations of exotic trees and people should not pick mushrooms in exotic tree plantations.

The discussion then shifted to the existence of a national strategy for NTFPs, particularly for wild edible mushrooms. Dr. Urs Bloesch inquired whether such a strategy was in place. Dr. Numan Amanzi responded, *“Currently, a national strategy for NTFPs is still under development, and the Ministry of Natural Resources and Tourism (MNRT) is coordinating the process.”* He further urged stakeholders to actively participate in the discussion. He stated that *“It is essential that we fast-track this process to ensure that NTFPs, including wild edible mushrooms, are well-managed and promoted.”*

These discussions underscored the importance of structured policy frameworks and regulatory measures in ensuring the sustainability and economic viability of NTFPs in Tanzania.

2.2. Wild edible mushrooms as a promising income-generating activity for enhanced conservation in Tanzania, presented by Dr. Chelestino Balama (TAFORI)

On a presentation prepared together with Dr. Upendo Msalilwa and Ms. Zacharia Mmary, Dr. Chelestino Balama, Director of Forest Research, emphasized the importance of wild edible mushrooms in terms of nutrition and economic benefits. He highlighted that these mushrooms contain between 27% and 48% protein, making them a valuable food source. In addition, they serve as a significant income-generating activity for local communities, with seasonal earnings ranging from TZS 1,200,000 to 2,700,000 Tanzanian Shillings. (Figure 5).



Figure 5: Dr. Balama (TAFORI) presenting the wild edible mushrooms as a promising income-generating activity for enhanced conservation in Tanzania.

Despite their numerous benefits, the mushroom sector in Tanzania faces several challenges, as outlined by Dr. Chelestino Balama. These include poor storage and drying techniques, often leading to contamination with sand. Additionally, the sector lacks comprehensive data on the current status and distribution of wild edible mushrooms across the country. Dr. Balama also highlighted that many mushrooms are not properly packaged or processed, which negatively impacts their marketability. To address these issues, he emphasized the need for capacity building, particularly in picking, preservation and drying techniques. He further recommended that TFS incorporates these strategies to help commercialize wild edible mushrooms and enhance their contribution to the economy.

Discussion

Dr. Urs Bloesch expressed concerns about the possibilities of domesticating ectomycorrhizal mushrooms (most of the edible mushrooms in miombo woodlands), because they live in symbiotic relationship with specific host trees. Dr. Greyson Nyamoga from SUA suggested that instead of focusing solely on domestication, efforts should be made to support the collection of wild mushrooms from forest reserves. He stated, *"Harvesting wild mushrooms directly from forests connects local communities to nature and fosters a sense of responsibility for ecosystem conservation."* He also emphasized that collaboration among different sectors would be crucial in improving the wild edible mushroom's industry in Tanzania (Figure 6).

Dr. Angela Makata from Forestry Training Institute Olmotonyi (FTI) in Arusha proposed that efforts be made to educate the public about mushrooms, particularly distinguishing edible from non-edible species. She suggested, *“Developing leaflets and other educational materials will help raise awareness and reduce the risks associated with consuming poisonous mushrooms (Figure 6).”*



Figure 6: Dr. Urs Bloesch from Adansonia-Consulting (left) expressed his concerns about the possibilities of domesticating wild mushrooms living in symbiotic relationship with specific host trees. On the second picture we see Dr. Makata from FTI (left) and Dr. Nyamoga from SUA (right) discussing measures to promote the awareness of wild edible mushrooms.

Mr. Michael Mayala, a representative from the Tanzania Bureau of Standards (TBS) – Western Zone, encouraged entrepreneurs involved in the wild edible mushroom business to apply for free certification. He explained that *“TBS offers free certification for small entrepreneurs for the first three years. After that, the fee increases gradually—25% in the fourth year, 50% in the fifth year, 75% in the sixth year, and 100% thereafter.”* However, he advised entrepreneurs to first seek a recommendation letter from Small Industries Development Organization (SIDO) as a prerequisite for certification. Mr. Jovine Nachihangu (TAWA), inquired about the utilization of wild edible mushrooms at community, market, and national levels. In response, two mushroom pickers and sellers, Ms. Suzana Jeremia and Hadija Ndindi, shared their experiences. *“The demand for wild mushrooms is high,”* they stated. *“However, we face challenges such as ensuring cleanliness, dealing with limited availability, and navigating the complex legal procedures required to access forest reserves.”*

2.3. Current state of research knowledge about wild edible mushrooms in Tanzania, presented by Professor Donatha Damian Tibuhwa (UDSM)

Prof. Donatha Tibuhwa delivered the third presentation, offering an insightful overview of wild edible mushrooms in Tanzania. She emphasized the role of key stakeholders—women, youth, and elders—in mushroom-related activities and highlighted the urgent need to preserve traditional knowledge about these valuable forest products. Despite their significance, wild mushrooms are abundant and available for free. She stressed the importance of establishing standardized procedures and market protocols at both the national and international levels to ensure their promotion and sustainable utilization (Figure 7).



Figure 7: Prof. Donatha Tibuhwa presenting the state of research on wild edible mushrooms in Tanzania (right) and exchanging with sellers from Tabora and Sikonge markets.

Prof. Donatha Tibuhwa also pointed out the challenges in knowledge transfer between elders and the young generations, which threaten the continuity of traditional mushroom practices. She emphasized the need to brand wild edible mushroom products under the Tanzania Bureau of Standards (TBS) to secure certification and uniform product standards. Additionally, she called for a national strategy and government intervention, particularly from the MNRT, TFS and TAWA, to address challenges within the mushroom added-value chain. She further stressed the importance of collaboration among stakeholders to present a unified voice to the government, ensuring strong policy responses and increased support for the mushroom sector. Concluding her presentation, she delivered a powerful message: *“Mushrooms are a vital product that can significantly improve people's livelihoods. They require no cultivation cost as they naturally regenerate in forests, making them a true gift from God. They serve as a source of income, enhance food security, and connect people to nature, ultimately contributing to stronger families and a more prosperous nation.”*

Discussion

Mr. Elvis Jonas, National Mushroom Consultant of ADAP raised two intriguing questions regarding wild edible mushrooms. He asked whether the smell of certain mushrooms attracts snakes and whether some tree species disappear when their associated mushrooms vanish due to their symbiotic relationship. In response, Professor Donatha Tibuhwa explained: *“Some mushrooms produce a milky fluid that attract snakes. However, this fluid acts as a natural trap (glue), making it difficult for the snake to escape, ultimately leading to its death.”* Regarding the symbiotic relationship of ectomycorrhizal mushrooms with host trees, she elaborated: *“Certain trees rely on mushrooms for their survival through a symbiotic relationship. If the mushrooms disappear, the associated tree species may struggle to thrive, eventually leading to their decline.”* Another question was posed by Mr. Kalolo, who inquired about the existence of a specific mushroom species used by Maasai to make bees drunk and sleepy during honey harvesting. Prof. Tibuhwa clarified: *“Yes, there is a mushroom species that makes bees sleepy and drunk what making honey harvesting safe.”* She reinforced the urgent need for further research on this valuable natural resource.

2.4. Forest regulations related to wild edible mushrooms and way forward, presented by Mr. Thomas Wambura (TFS western zone)

Mr. Thomas Wambura provided an overview of the policies, acts, and regulations governing the conservation and utilization of forest resources, including wild edible mushrooms (Figure 8). Furthermore, he stressed the economic contribution of forest resources at both community and national level and the importance of meeting the needs of local communities while ensuring resource sustainability.

He emphasized that promoting wild edible mushrooms aligns with Policy Statement No. 13, which focuses on the utilization of NWFPs, including wild mushrooms. This policy fosters a conducive environment for research, market exploration, and the dissemination of accurate information related to wild edible mushrooms.

Mr. Thomas Wambura further explained that the Forest Act of 2002 guide the issuance of permits to access and utilize forest products, including mushrooms, and specified penalties for non-compliance. Under Act No. 6, TFS is authorized to issue permits and licenses for commercial forest resource activities. Additionally, Regulation No. 56 (TFS Gen 59) permits free entry for individuals collecting wild edible mushrooms for personal consumption. However, those collecting mushrooms for commercial purposes are required to pay an annual fee of TZS 100,000. They must also return to the TFS office for weighing and scaling, at a charge of 50 Tanzanian Shillings per kilogram. This process is enforced daily for individuals collecting mushrooms from forest reserves under TFS management.

Discussion

Mr. Elvis Jonas, national mushroom consultant, requested a waiver for local mushroom pickers regarding entry fees into forest reserves, similar to the exemption granted to local beekeepers. He argued, *“Waiving fees during the early stages of the business would help promote the mushroom business, and charges could be introduced later once the business has expanded.”*

In response, Mr. Thomas Wambura explained that the current fee structure is based on Gen 59, which provides the legal framework for TFS officers. However, he acknowledged that if mushroom pickers seek a waiver on entry fees, they would need to formally submit a complaint for review. He further clarified, *“Any amendments to these regulations fall under the Forestry and Beekeeping Division of the MNRT, not TFS, making it a lengthy process.”*

The second question was raised by Ms. Sandy Mermod (ADAP) and Romanus Mwakimata (ADAP), who expressed concerns about the long distances between villages and TFS offices. Ms. Mermod explained, *“Many mushroom pickers must travel great distances to obtain entry permits and later return for mushroom weighing, which creates logistical challenges for rural communities.”*

In response, Mr. Thomas Wambura explained that entry permits must be collected from TFS offices, as required by Act No. 56, and compliance with this legal procedure is mandatory. However, he acknowledged the practical challenges faced by pickers and stated, *“TFS will explore possible solutions, such as coordinating with local communities to establish designated days for issuing permits at the village level.”*

The discussion highlighted the need for policy adjustments to better support local mushroom pickers while ensuring nature conservation.

2.5. Forest regulations related to wild edible mushrooms and the way forward, presented by Mr. Jovine Nachihangu (TAWA western zone)

Mr. Jovine Nachihangu highlighted that from TAWA's perspective, the issue of wild edible mushrooms is a new topic that requires further discussion before any concrete actions can be taken (Figure 8).



Figure 8: Mr. Thomas Wambura (left) and Mr. Jovine Nachihangu (right) providing a brief on the policies, acts, and regulations governing the utilization of forest resources under the TFS and TAWA.

Mr. Nachihangu explained that TAWA's primary experience with the use of NWFP has been with fishing and beekeeping, noting, *"After integrating fishing and beekeeping into TAWA game reserves, we observed a decrease in poaching activities."* He suggested that promoting wild edible mushroom collection in game reserves could be another effective strategy to further reduce illegal activities and support neighboring communities. However, he emphasized the need for more time and discussions to determine how best to integrate this idea into Game Reserves. *"Several challenges must be considered, including how to monitor activities and establish proper zoning, as mushroom collection could interfere with other conservation efforts,"* he added.

Discussion

Mr. Abdala Liingilie, Principal Research Investigator (ADAP) on wild edible mushrooms in western Tanzania inquired if it is possible to integrate wild edible mushroom collection within the beekeeping zones of the Rukwa Game Reserve. He narrated that he is aware that there is a designated beekeeping zone, and it seems feasible to allow mushroom collection within that area. In response, Mr. Jovine Nachihangu acknowledged that this was a new concept for them. *"We need more time to fully understand the details before making any decisions,"* he stated.

2.6. Development of a value chain for wild edible mushrooms in western Tanzania, presented by Jovin Lwehabura (ADAP) and Dr. Urs Bloesch (Adansonia-Consulting)

Mr. Jovin Lwehabura, national representative provided a brief overview of ADAP's work in western Tanzania, highlighting key achievements in conservation and community development. These included the facilitation of the establishment of the Mlele Beekeeping Zone (850 km²), capacity building for the Inyonga Beekeepers Association, training and equipping 80 village forest guards and game scouts, and supporting patrols and vegetation monitoring. Additionally, he noted that ADAP had expanded the supported areas to three protected areas, covering 33 villages, and emphasized the organization's efforts in developing a wild edible mushroom value chain (see link for the video broadcasted on Geneva TV in **Annex 2**).

Dr. Urs Bloesch continued the presentation, focusing on ADAP's role in establishing a sustainable wild edible mushroom value chain. He explained that *"the goal is to develop a system that generates additional income at both the production (supply) and market (demand) levels by fostering entrepreneurship. This approach not only provides economic benefits but also adds monetary value to the Miombo woodlands, thereby contributing to reduced deforestation."*

Dr. Bloesch outlined the key activities undertaken in the initiative. He stated, *"ADAP organized interested mushroom pickers into producer groups that were incorporated into professional associations or cooperatives."* Additionally, an inventory of wild edible mushroom species was conducted, documenting both vernacular and Latin names. In total, 98 species were recorded in the field, whereof 63 named scientifically at species level. This included 51 edible species, most of them ectomycorrhizal from 3 families (see **Annex 2**). ADAP also assessed local ethnomycological knowledge, including how fresh and dried mushrooms are currently used.

Moreover, he stated *"Training was provided on proper harvesting, transportation, storage, and drying techniques, and an initial market potential assessment was conducted to evaluate the demand for wild edible mushrooms"*. He added, *"We tested solar dryers to improve mushroom drying techniques and developed a leaflet on the principal edible fungi in the Miombo woodlands of central and western Tanzania, available in both English and Swahili"* (see annex 2). It is very important to cut mushrooms with a knife to avoid sand and destruction of the underground part (mycelium) and to cut the mushrooms into slices before drying them to ensure proper drying and to check that there is no worm inside.

However, Dr. Urs Bloesch identified several regulatory challenges that must be addressed to ensure the value chain operates effectively. He pointed out, *"Entry and picking permits for individual group members are a complicated procedure and the mandatory inspection of harvested mushrooms at TFS offices is time-consuming due to long distances, which increases the risk of mushroom spoilage."*

To overcome these challenges, he emphasized the importance of strengthening partnerships with all key stakeholders along the value chain. He stated, *"We need to work closely with TAFORI, TFS, TAWA, SIDO, TBS, local authorities, and other relevant organizations to facilitate and promote a sustainable wild edible mushroom value chain."* Additionally, he called for streamlining the process for obtaining entry and mushroom picking permits at the group level. *"We should simplify the procedure for acquiring permits for Forest Reserves (TFS) and Game Reserves (TAWA) to encourage the growth of this sector. Additionally, all mushroom groups should be registered at the district level."*

Discussion

Dr. Numan Amanzi (TAFORI) inquired about the dominant wild edible mushroom species in the western zone and their production potential. In response, Dr. Urs Bloesch explained, "*The most dominant species in the region include Wange, Umpalala, Usikova, Ukukwe, and Kansolele.*"

Dr. Greyson Nyamoga (SUA) then raised concerns about the challenges related to entry permits to Forest Reserves which are under the control of the TFS Offices. He suggested that, if possible, "*Mushroom pickers should focus more on village forest land and enhance conservation efforts in those areas.*" Romanus Mwakimata (ADAP), supported this idea, adding, "*Some villages, such as Majojoro, already have designated village forest land, which could be utilized for mushroom collection and conservation.*" However, the deforestation rate is very high on village lands caused by the high population growth and high rate of immigration of pastoralists. As a result of the increased number of people and cattle, it becomes more and more difficult to find mushrooms outside forest reserves.

2.7. Insights from local pickers on the opportunities and challenges in the wild edible mushroom business

Ms. Leah Mwarabu speaking on behalf of the pickers, first expressed her gratitude to ADAP for its efforts in improving the wild edible mushroom sector in Tabora and Katavi Regions (Figure 9). She acknowledged the contributions made by ADAP, stating that, "*We appreciate the various training provided to pickers in the project villages. The solar dryers installed in the project villages by ADAP are useful for the local communities engaged in the mushroom business. All this fund were supported by ADAP totaling to over TZS 120 million. ADAP also provided training on the improved harvesting and drying techniques of the mushrooms.*" She shared a personal testimony, stating that, "*One picker confirmed that she used her mushroom income to pay school fees, and now her son is studying at the university level. Others have been able to buy school uniforms for their children in both primary and secondary schools.*" She also noted that mushrooms serve as a daily food source, acting as a primary vegetable in many households.



Figure 9: Local picker Ms. Leah Mwarabu (left) and Mr. Thomas Kabanda (right with blue shirt) sharing her experiences and providing evidence on the opportunities and challenges from a field perspective.

Ms. Leah Mwarabu then outlined the challenges faced by mushroom pickers in western Tanzania. She emphasized the complexity of regulations and procedures for obtaining entry permits to the forest reserves from TFS. She narrated that the long distances to the TFS office and the costs make it difficult for them to access the necessary permits. She said that *"We urge TFS to consider granting a temporary waiver on entry fees to support the promotion of the mushroom business."* Additionally, she suggested that TFS should bring permit services closer to villages or ward levels, especially during mushroom peak seasons, to ease access for pickers. She also called for support beyond ADAP, asking other stakeholders to assist with market connections, packaging materials, training, and other facilitation services.

Further, she spoke about additional challenges, including the negative impact of livestock on mushrooms, climate change, and the long distances pickers must walk—often up to six hours—to collect mushrooms in the forest reserves. She noted that TFS restricts the use of motorbikes for mushroom collection, which adds to the difficulty. She urged authorities to reconsider this policy, stating, *"Fresh mushrooms spoil easily, so allowing motorbikes would enable timely and efficient transportation"*. Motorbikes are authorized to collect honey, fish or timber.

Discussion

Mr. Thomas Wambura (TFS) asked, *"Which year was the best for mushroom harvesting, and where do you sell the collected wild mushrooms?"* Ms. Mwarabu responded, *"The years 2022/2023 and 2023/2024 were particularly good for mushroom availability. We primarily sell mushrooms in local village markets and to individual customers within the villages. Occasionally, we sell to towns and urban markets, though not frequently."*

Next, Dr. Numan Amanzi (TAFORI) inquired about how the mushroom picker groups operate, whether they collect mushrooms individually or in groups, how they handle revenues, and what they do outside the mushroom season. Ms. Leah Mwarabu explained, *"Mushrooms are collected by groups for safety purposes in the bush. Likewise, some earnings are saved, while the rest is shared among group members to cover daily needs, such as purchasing food, school uniforms, and school fees."*

Dr. Greyson Nyamoga (SUA) suggested that *"During the high mushroom season, TFS should bring permit services directly to the villages rather than requiring pickers to visit the TFS offices which seem to be far from the villages."* In response, Mr. Thomas Wambura and Eleuter Kibiki (TFS) revealed that, *"In some areas, such as Sikonge and Urambo, we already issue permits through TFS checkpoints located closer to the villages in order to assist mushroom pickers to get their permit timely."*

Following this, Prof. Donatha Tibuhwa (UDSM) congratulated the pickers on registering their groups at the district level. She advised them to seek additional support, stating, *"You should explore funding opportunities from the government, particularly at the district level, which provides financial support to small entrepreneurs. This could help in establishing small-scale industries for mushroom processing while maintaining their original color and taste, even when dried."*

Finally, Mr. Thomas Kabanda (Figure 9), a representative of pickers from Nsimbo District in Katavi Region, expressed his appreciation to ADAP, saying, *"We are grateful for the theoretical and practical training ADAP has provided to improve the wild edible mushroom value chain. Thanks to ADAP's support, solar dryers have been constructed, and our group in Nsimbo District is now officially registered. Soon, we will open a bank account to safely deposit our earnings from mushroom sales."*

2.8. Insights from local sellers on the opportunities and challenges in the wild edible mushroom business

Ms. Suzan Jeremia, a local seller from the Tabora Municipal - Mto wa Kenge Market Place, expressed her gratitude to ADAP for organizing the workshop and bringing together key stakeholders, including local pickers and sellers, to discuss opportunities and challenges in the wild edible mushroom trade (Figure 10). She emphasized the importance of *"sharing evidence and experiences along the mushroom value chain."*

Ms. Jeremia highlighted that there is a huge market for mushrooms, both fresh and dried. She explained, *"I sell to local buyers around Tabora, national customers from Arusha, Mwanza, Dar es Salaam, and Zanzibar, as well as international customers through middlemen who usually export to Oman."* She further stated, *"I have been in this business for over 25 years, having inherited it from my parents."*



Figure 10: Ms Jeremia on the left, Ms Ndindi in the center and Ms. Seif on the right, local sellers highlighting the key opportunities and challenges in marketing

She pointed out that income from mushroom sales is crucial for their livelihoods, as it helps *"purchase additional food, pay school fees, and one of my greatest successes has been supporting my children through university education (Figure 10)."* She suggested that to further promote the business, it would be beneficial to *"establish a small mushroom processing plant, which will add more value and help maintain the original color and taste of dried mushrooms, making them as appealing as fresh ones."*

Tatu Seif, a local seller from Sikonge Market expressed her gratitude to ADAP for installing solar dryers in villages, stating, *"Now I receive clean, well-dried mushrooms. In the past, we used direct sunlight for drying mushrooms on a mat in an open space, which often led to spoilage, especially during the rainy season."*

Discussion

Dr. Chelestino Balama (TAFORI) inquired about the prices of fresh and dried mushrooms across different markets. In response, Suzan Jeremia explained, *"Prices vary depending on the species and whether the mushrooms are fresh or dried."* She elaborated that fresh mushrooms are sold in bunches, with prices ranging from TZS 500 to TZS 5,000, while dried mushrooms have different price points: Kansolele for TZS 20,000–30,000 per kg, Uhima for TZS 20,000 per kg, and Usikova and Utova for TZS 15,000 per kg.

When asked about how pickers are paid, she stated, *"The price depends on negotiations between the seller and the picker."* On the topic of international markets, she added, *"Middlemen buy from me and export to Oman, where there is a huge demand, but I am not directly connected to these buyers."* Sandy Mermud (ADAP) asked how sellers obtain mushrooms from pickers. Suzan replied, *"Pickers usually bring the mushrooms to the market themselves."* Adding to this, Hadija Ndindi, a seller from Tabora Municipal – Mto wa Kenge Market Place, stated, *"Sometimes, we travel to pickers' villages to buy mushrooms."*

Dr. Urs Bloesch (Adansonia-consulting) raised a question about the role of middlemen in the trade of wild edible mushrooms and how prices differ between pickers and middlemen. Local sellers confirmed, *"Yes, middlemen are involved, and their prices are usually higher than those offered to pickers."* Sandy Mermud then directed a question to Tatu Seif, asking whether she was connected to Tabora Municipal for mushroom supply. Tatu responded, *"Yes, I sometimes send mushrooms to Tabora when I have a large quantity, but since my supply is small, I mostly sell within Sikonge District."*

The final question came from Dr. Revocatus Mushumbusi (TAFOIR), who asked whether fresh or dried mushrooms have a higher market value. Suzan explained, *"Dried mushrooms have a higher market value than fresh ones."* She elaborated that during the mushroom high season, *"many sellers enter the market, and fresh mushrooms are widely available, even on the streets."* However, during the off-season, supply decreases, making dried mushrooms more valuable. She emphasized the need for better storage facilities and processing centers, stating, *"We need support to establish proper storage and processing facilities to ensure fresh mushrooms are available at the market level."*



3. Discussions on challenges in working groups

Participants were divided into three groups:

- Group 1 focused on developing a **strategy for enhancing the value chain of wild edible mushrooms**. It was led and moderated by Dr. Numan Amanzi from (TAFORI).
- Group 2 examined the **role of the private sector in the value chain**, particularly in areas such as transportation, vending, packaging, and hotel industry involvement. It was led and moderated by Mr. Elvis Jonas, the National Consultant for ADAP.
- Group 3 worked on identifying an **appropriate governance system** for marketing wild edible mushrooms. Each group later presented their findings in a plenary session. It was led and moderated by Dr. Upendo Msalilwa (TAFORI).

After the restitution of each group, we were able to summarize challenges and way forward both at local and national levels.

The major **challenges identified at the national level** were the following ones:

- Insufficient research on wild mushrooms (local knowledge, uses, sales).
- Lack of public awareness on the existence and benefits of wild mushrooms.
- No national strategy for non-wood forest products, especially mushrooms.
- Complexity regulations that make mushrooms picking access difficult on reserve land.
- Lack of political support to develop the added-value chain.
- Forests degradations (cattle grazing), high deforestation, especially on village land (figure 12).
- Climate change which leads to increased and unpredictable dry spells in the rainy season.

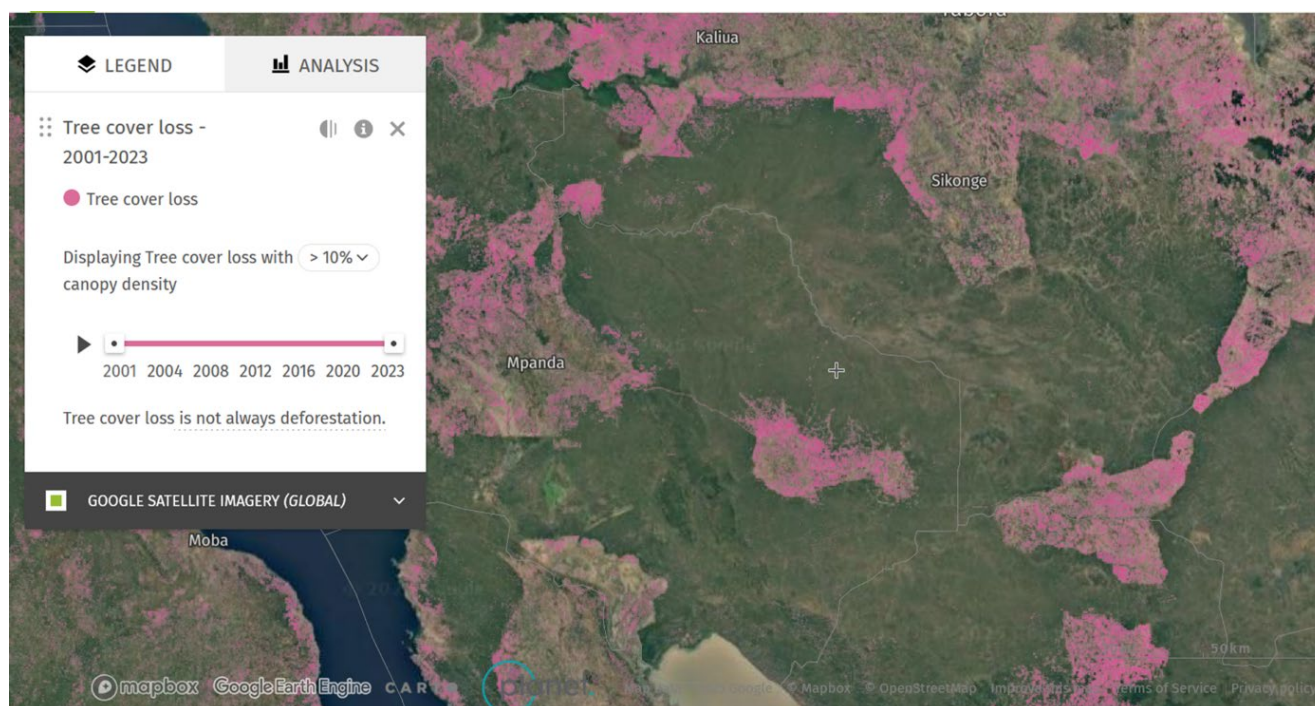


Figure 11: Deforestation on village land is high, and mushrooms are now mostly found on protected land (source: Global Forest Watch, February 2025).

The major **challenges identified at the local level** were the following ones:

- Inadequate harvesting, drying, and storing facilities and technologies for mushrooms leading to poor product quality.
- Lack of linkages between mushroom collectors and private sector.
- Insufficient capital of pickers causing them to fail to invest in materials (packaging, bikes, etc.).
- Inadequate knowledge of the branding and certification process of mushroom products.
- Lack of empowerment of women (capital and the way to dispose of their earnings).
- Poor access to the forest reserves due to long distances and rough roads.
- Dynamize existing mushroom groups to have only interested and committed group members.



Figure 12 On the left, group 3 works on the issues of governance of wild mushrooms at the national level. On the right, Dr. Numan Amanzi (TAFORI) presents the discussion of the group1 to the plenary.

4. Way forward and conclusion

The workshop participants discussed and agreed on the key challenges regarding wild mushrooms and formulated suggestions to address them (Table 1 and 2).

The workshop concluded with a collective commitment to overcoming the challenges hindering the growth of Tanzania's wild edible mushroom sector. The establishment of the National Mushroom Forum Tanzania was identified as a key action point to unify stakeholders, build partnerships, advocate for policy reforms, and enhance market access. To initiate this effort, a WhatsApp group was created for discussions on structuring the forum, and a core team was selected to oversee its formalization including Prof. Donatha Tibuhwa (UDSM), Dr. Greyson Nyamoga (SUA), Dr. Revocatus Mushumbusi (TAFORI), and Romanus Mwakimata (ADAP). Their leadership will guide efforts to streamline regulations and promote the sustainable commercialization of mushrooms. Additionally, following suggestions from Prof. Tibuhwa and Dr. Greyson Nyamoga, participants agreed to explore value-added mushroom products, such as mushroom powder, biscuits, and vinegar, to diversify markets, boost profitability, and enhance food security. The workshop's collaborative spirit and the concrete action points mark a crucial step toward establishing a thriving, well organized and regulated mushroom sector that benefits both communities and the environment.



Asante sana!



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Table 1: Key challenges and the suggested way forward at the NATIONAL level

Challenge	Way forward		
	Central government	Regional and local governments	NGOs
Insufficient research on wild mushrooms (local knowledge, uses, sales)	MNRT, TAFORI, Universities: Study the gaps in knowledge of wild edible mushrooms.	Welcome the researchers and ease their work.	Fund research that could improve the actions of the projects.
Lack of public awareness on the existence and benefits of wild mushrooms	TAFORI, Universities, MNRT: Be part of a national forum to promote wild edible mushrooms. Share the informative poster about wild edible mushrooms prepared by the co-organizers of the workshop (see Annex 3).	Participate in events and discussions organized by the national forum. Share the informative poster about wild edible mushrooms prepared by the co-organizers of the workshop (see Annex 3).	Media: Promote wild mushrooms on TV, radio and newspapers. Participate in events and discussions organized by the national forum. Share the informative poster about wild edible mushrooms prepared by the co-organizers of the workshop (see Annex 3).
No national strategy for NWFPs, especially mushrooms	MNRT: Elaborate a national strategy in collaboration with TAFORI.	Implement the strategy once adopted.	Raise funds for a national strategy and participate in its development.
Complicated regulations that make picking difficult on reserve land	MNRT, FBD and WD: Work on new regulations to ease the collection and promotion of wild mushrooms. TFS: Adapt the way of issuing permits to the context and season. TAWA: allow mushroom picking (between December and March) in the new general management plans of games reserves close to villages.	Support the pickers in their legal procedures for harvesting mushrooms and defend their interests.	Facilitate the dialogue between all the stakeholders at national level to improve the legal framework.

Challenge	Way forward		
	Central government	Regional and local governments	NGOs
Lack of political support to develop the added-value chain	Universities: share executive summaries of their findings to the government and politicians. MNRT: Broadcast documentation on wild edible mushrooms and inform the members of parliament of the stakes and way forward.	Involve their member of parliament and local politicians.	Fund and create documentation on wild edible mushrooms (videos, flyers, field guides, etc.).
Forests degradations, high deforestation, especially on village land	MNRT, TFS, TAWA: Enforce the law to avoid deforestation (including illegal cattle grazing) and implement afforestation program (including Assisted Natural Regeneration).	Enforce the law to avoid deforestation (land use planning, patrols, sensitization of citizens).	Raise awareness about deforestation and its consequences. Support the preservation of forests through income generating activities.
Climate change and rainfall pattern in the rainy season	MNRT, TFS, TAWA: Raise awareness about carbon emissions (land use) and climate change and promote low carbon emissions solutions.	Ensure the law enforcement to avoid deforestation and bush fire.	Raise awareness about carbon emissions (land use) and climate change and promote low carbon emissions solutions.

Table 2: Key challenges and the suggested way forward at the LOCAL level

Challenge	Way forward				
	Central government	Local governments	NGOs	Cooperatives/ Pickers	Retailers/Buyers
Inadequate harvesting, drying and storing of mushrooms	TFS: be more involved in studying, monitoring and knowing the good practice in mushroom picking. Attend the training given to the groups of pickers.	Make some village land available for common infrastructures such as mushroom dryers.	Propose regular training and monitor the value chain (from pickers to sellers). Provide solar dryers for each village.	Use the appropriate techniques for harvesting, drying, packaging and storing mushrooms. Be aware of the quality criteria.	Explain their needs to the pickers. Be aware of the quality criteria for mushrooms.
Lack of connections between pickers and private sector	TFS: Have a list of the mushroom groups and facilitate their connection with the buyers. Invite the pickers to showcase their products during fairs or national days organized by the government.	Inform the pickers, middlemen, and sellers of their area about the current initiative to promote a high-quality value chain.	Facilitate the connection of pickers, middlemen, retailers, and private sector (update the lists of contact, organize meetings, support the pickers to showcase their products like in Saba Saba.)	Be in contact with Tabora and Mpanda markets. Find medium-term shipping solutions (with bus companies or specific transporters)	Have the contacts of the groups and buy directly from them to avoid middlemen and the lack of traceability.

Challenge	Way forward				
	Central government	Local governments	NGOs	Cooperatives/ Pickers	Retailers/Buyers
Pickers lack capital to invest in material	TFS: waive the harvesting fees in the first years to develop their business.	Provide more support to groups through loans or grants in their districts.	Build the capacities of the groups and cooperatives in financial management. Monitor and coach them in the first years.	Have a system of savings to be able to invest for the next seasons (motorbikes, repair of the dryers, baskets, etc.)	Provide some in-kind contributions like organic baskets, packages or gum boots.
Lack of knowledge on the branding and certification process	TBS and SIDO: Explain the requirements to the pickers and assist them with the certification.	Facilitate the meetings between TBS, SIDO and the pickers.	Support the groups and cooperatives to launch their business. Support the pickers in meeting the criteria to be certified.	Attend some training. Follow strictly the requirements for the certification.	Understand the added value of a certification (safety, traceability, quality).
Lack of women disempowerment	Ministry of Community Development, Gender and Children: continue to work on empowerment of Tanzanian women.	Provide loans to women groups and support women empowerment in their districts and villages.	Raise awareness within the households on gender issues and budget management.	Establish some rules on the use of revenue from mushrooms (school fees, clothes, etc.).	

Challenge	Way forward				
	Central government	Local governments	NGOs	Cooperatives/ Pickers	Retailers/Buyers
	TFS, TAWA: ensure that protected areas are safe for groups of women.	Ensure that their village land is safe for women. Report any problem of sexual harassment or domestic violence.	Monitor the way groups and cooperatives deal with gender equity. Report any problem of sexual harassment or domestic violence.	Ensure a fair division of benefits between women and men. Have 50% of women in the committees. Report any problem of sexual harassment or domestic violence.	
Long distance and rough roads	TFS: Allow the use of motorbikes for mushroom picking. Send officers in the remote villages to issue the permits and control the harvest. TAWA: in any new management plan consider an area for mushroom picking between December and March for Game Reserves neighboring village land.	Enforce their land use plans and protect the natural forests on village land to make wild mushrooms available close to the households.	Support the maintenance of tracks within protected areas (that will be used for law enforcement too).	Use their savings to invest in bicycles, motorbikes or renting cars to collect mushrooms at the entry points of protected areas.	Pay advance payments to the pickers to enable them to access the harvesting sites (renting a car, fuel for motorbikes, etc.).

Challenge	Way forward				
	Central government	Local governments	NGOs	Cooperatives/ Pickers	Retailers/Buyers
Dynamize existing mushroom groups to have only interested and committed group members			<p>Assess the level of knowledge and motivation of each group member.</p> <p>Avoid rent-seeking attitudes and support only skilled and motivated pickers.</p>	<p>Keep only verified members within their cooperatives to ensure the quality of the mushrooms, a fair reputation and the good operation of their institutions.</p>	

Annex 1 Program of the two-day workshop

27 February 2025 – Current knowledge of wild edible mushrooms and challenges

08:00 – 09:00	Registration	
09:00 – 09:15	Welcome remarks	Dr. Revocatus Mushumbusi, TAFORI Ms. Sandy Mermod, ADAP
09:15 – 09:30	Opening of the workshop by the guest of honor	Mhe. Paul Matiko Chacha, Tabora Regional Commissioner
National level		
09:30 – 10:00	Importance of non-timber forest products in Tanzanian forestry	Dr. Numan Amanzi, TAFORI
10:00 – 10:30	Wild edible mushrooms as a promising income generating activity for increased conservation	Dr. Chelestino Balama, and Dr. Upendo Msalilwa, TAFORI
10:30 – 11:00	Break	
11:00 – 11:30	Current state of research knowledge about wild mushrooms in Tanzania	Prof. Donatha Tibuhwa, University of Dar es Salaam
11:30 – 12:00	Forest regulations related to wild edible mushrooms - the way forward	Mr. Thomas Wambura, TFS Mr. Jovine Nachihangu TAWA
Local level		
12:00 – 12:30	ADAP's initiative on wild edible mushroom in Katavi and Tabora Regions (miombo woodlands)	Dr. Urs Bloesch, Adansonia-Consulting
12:45 – 14:00	Common lunch / exposition of wild edible mushrooms	
14:00 – 14:30	Inputs from the pickers (in Swahili)	Mushroom pickers & sellers
Discussions on challenges in working groups		
14:30 – 15:45	Elaboration of added-value chain for wild edible mushrooms (strategy)	Facilitator: Dr. Urs Bloesch
14:30 – 15:45	Participation of the private sector (transportation, vendors, packaging, hotels...) (in Swahili)	Facilitator: Mr. James Lyamuya
14:30 – 15:45	Appropriate governance system for marketing wild edible mushrooms	Facilitator: Dr Upendo Msaliwa
15:45 – 16:30	Presentation of groups discussion in plenary	Mains facilitator: Dr Amani Uisso & facilitators of each panel

28 February 2025 – The way forward for developing a sustainable added-value chain of wild edible mushrooms in Tanzania

08:00 – 09:00	Registration	
09:00 – 09:15	Welcome of new participants	Dr. Chelestino Balama, TAFORI Mr. ovin Lwehabura, ADAP
09:15 – 10:00	Wrap-up of key findings from national level and discussion	Dr. Numan Amanzi, TAFORI Dr. Urs Bloesch, Adansonia-Consulting
10:00 – 10:45	Wrap-up of key findings from project level and discussion	Mr. Romanus Mwakimata, ADAP Mr. Frank Kweka ADAP
10:45 – 11:15	Break	
11:15 – 12:15	The way forward for the development of a reliable added-value chain of edible mushrooms in Tanzania	Dr. Numan Amanzi, TAFORI Dr. Urs Bloesch, Adansonia-Consulting
12:15 – 12:30	Closing of the workshop	Mr. Abdulahaman Mndeme, Assistant to RAS on Economic and Livelihoods
12:30 – 14:00	Common lunch	
14:00 – 15:00	Joint visit of the promotional stands with mushrooms	

Find the news related to this workshop, the pictures and videos:
adap.ch/en/mushrooms2025

For more information:
www.adap.ch/en/
tafori.or.tz/
www.adansonia-consulting.ch/



Annex 2 - Promotional material made by ADAP and TAFORI

TV set about ADAP's mushroom project on Geneva TV, May 2024: <https://vimeo.com/943795289>



Field leaflet with the 12 most common edible species: Available on demand: [tanzania\[at\]adap.ch](mailto:tanzania@adap.ch)



Further media coverage and updates can be found on: www.adap.ch/en/mushrooms2025

Recap video of the workshop by TAFORI: <https://youtu.be/ZATtYBPnmcs?si=hHNgxttV916Bsbt->



WILD EDIBLE MUSHROOMS OF MIOMBO WOODLANDS

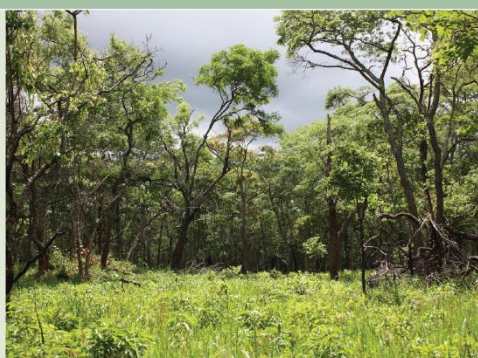
• Why are they important ?

Many wild mushrooms are connected with their roots to trees in the forest. So if the forest is cut, the mushrooms disappear also. If local communities earn income with wild mushrooms, they are incited to protect natural forests. And wild mushrooms are delicious!



• What is the differences with cultivated mushrooms?

Cultivated mushrooms need very specific conditions to grow and this requires infrastructures while the wild mushrooms are very abundant and can be found in all the miombo woodlands during the rainy season. Moreover wild mushrooms have mostly better nutritional values for protein, fibre, carbohydrate and minerals compared to cultivated mushrooms.



• Is it risky to pick wild edible mushrooms?

If you don't have the traditional knowledge, consult experienced and knowledgeable people on edible wild mushrooms for insights. Check the regulations for entering in the forests. And never collect mushrooms from plantations with exotic trees (pines, eucalyptus or black wattle), as they can be deadly poisonous.

• Where can I buy wild edible mushrooms?

At the city/town market, along the streets or in villages, but check that the seller is experienced and knows well the edible mushrooms being sold.

Fresh mushrooms: be sure they are not spoiled or infested by insects before cooking them.

Dried mushrooms: should be well-packed, with no moisture inside, and have an official label with species names, date and contacts of the seller.



Wange njano (Cantharellus afrocibarius), Ukukwe (Cantharellus miomboensis), Wange nyekundu (Cantharellus symoensis), Umpalala (Lactarius kabansus), Ulelema (Amanita loosei), Kansolele (Termitomyces microcarpus)

PARTNERS



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2. Bloesch, U. (2022a) Wild edible mushrooms from Western Tanzania. Leaflet. Association for the Development of protected areas, Adansonia-consulting.
3. Bloesch U (2022b) The added value chain for wild edible mushrooms in Katavi and Tabora regions. Stage 1: Baseline data, training and strategy. Co-management of Rungwa and Katavi-Ugalla corridors forest. Adansonia Consulting. 37p.