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#### About Joto Afrika

*Joto Afrika* is a series of printed briefings and online resources about adapting to climate change in sub-Saharan Africa. The series will help people understand the issues, constraints and opportunities that poor people face in adapting to climate change and escaping poverty.

*Joto Afrika* is Swahili; it can be loosely translated to mean 'Africa is feeling the heat'. Future issues will focus on climate change and pastoralism and climate change and energy. Please tell us what you think about this sixth issue of *Joto Afrika* and what you would like to read in the future issues – contact details are on **page 8**.



Women harvesting grass to sell during drought periods, Kyuso, eastern Kenya  
© Noah Lusaka, ALIN 2009

## Women as key players in climate adaptation

### Editorial

**Global debates identify the need to mainstream gender into climate change analysis, in relation to risk analysis, perceptions of vulnerability, experiences and coping mechanisms. The justification for this is that gender often dictates who gains and who loses in environmental disasters.**

A London School of Economics study of disasters in 141 countries shows that gender differences in deaths from natural disasters are directly linked to women's economic and social rights. Where women lack basic rights, more will die from natural disasters than men; where they enjoy equal rights, the death rate is the same.

Further statistics reveal the real issues around gender and climate change adaptation. Women provide up to 90 percent of rural poor people's food and produce 60-80 percent of the food in most developing countries. But women are insufficiently represented in decision-making processes on climate change, for example community adaptation and mitigation strategies. Women must be included, because they can contribute different perspectives and experiences.

#### Local knowledge

Women are the best managers of natural resources because of their closeness to and high dependence on natural capital. Their local knowledge systems are important for climate adaptation. For example, women can initiate adaptive water management since they know the water sources and can negotiate with neighbours for water. And information sharing and networking among women's groups are leading pathways in adaptation.

This issue of *Joto Afrika* provides case studies of local knowledge in action across Africa, and success stories from research to showcase how gender analysis and representation are involved in climate adaptation. Drawing from these, there are several implications for climate adaptation in Africa.

- **Work with women.** Women's organisations have information, knowledge, experiences, networks and resources that are vital to increasing resilience in the face of disasters. It is imperative to work with and build the capacities of existing women's groups.
- **Invest in effective communications, both in research and policy.** Women are powerful agents of change and their leadership is critical. They can help or

hinder progress on issues such as energy consumption, deforestation and the burning of vegetation, among many others.

- **Think big.** Gender equality and the principles of risk reduction must guide all efforts to mitigate disasters and respond to them.
- **Know the facts.** Vulnerability to climate-related risks are not always the same for men and women in any population. Gender analysis is imperative to develop and deploy responsive adaptation strategies that are fair to women and men.
- **Resist stereotypes.** Base all initiatives on knowledge of the specific local contexts and differences of each culture, their economic situation, and politics and gender, not on generalisations.
- **Use a human rights approach.** Democratic and participatory initiatives help women and girls more. Both men and women have a right to the conditions they need to enjoy their fundamental human rights, as well as simply to survive.
- **Avoid overburdening women.** They already have a heavy workload and many family responsibilities.
- **Provide equal financing.** Funds for adaptation, such as the World Bank's Community Development Carbon Fund, should ensure that gender considerations are taken into account and that the initiatives implemented meet women's needs.

#### Grace Adeniji

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### Gender not sex

Gender refers to the differences in socially constructed roles and opportunities associated with being a man or a woman, including the interactions and social relations between men and women. Socio-cultural structures and factors in most indigenous African societies mean women are often more vulnerable than men to climate risks.

### See also

*The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981–2002* by E. Neumayer and T. Pluempner, T. 2007  
<http://bit.ly/dQkquv>



# Including women in adaptation processes

## Case study

Workshop participants performing a role play to express gender relations with respect to climate change, South Africa  
© Indigo Development & Change, 2010

**Climate change can exacerbate inequalities. Because of their position in many societies, women tend to be more vulnerable to climate variability and change, and often experience larger negative impacts than men. Adaptation strategies should not consolidate or extend these inequalities.**

One way to ensure this is to enable women's participation in all learning and decision-making related to climate adaptation, at all levels. But including women in a meaningful way is not easy. Women tend to provide the continuity in society; they stay at home to attend to children, and elderly and ill relatives. There may be livestock to attend to and food to prepare. In contrast, men are usually more mobile and often have more wide-ranging networks.

### Climate change preparedness

For the past six years, Indigo Development & Change, a South African non-governmental organisation, has facilitated climate change preparedness workshops every three months in the Suid Bokkeveld, a remote, semi-arid area in South Africa.

The workshops were triggered by a very severe drought that lasted three years, and have evolved from a small group of mostly male farmers into rich quarterly community gatherings. Topics discussed include seasonal weather forecasts, results from farmers' climate dairies, and strategies to deal with extreme climatic conditions and climate variability.

Facilitators planned carefully to ensure spaces to allow women and men full participation in the workshops. However, only a few women attended the first workshop and several brought their children with them. The children's needs took the women's focus off the workshop content, as did their attention to catering.

At the women's suggestion, the children were invited to engage in their own activities, run by two facilitators. The children enjoyed this and it has become a regular feature. The report from the children's workshop is a highlight of each workshop! Catering is now provided by community members not engaged in farming. Furthermore, a bus collects all participants at convenient pick-up points, so everyone is equally mobile.

The workshops provide an invaluable opportunity to understand the perspectives of women farmers in the area. They create a space for joint learning and reflection in the community, where men and women can share their experiences, collect information from small-scale experiments and climate monitoring, and plan strategies in anticipation of climate variability.

Men and women propose small adaptation projects on their farms at workshops as well. This is a great confidence booster for some women, who report back on successes and challenges encountered. The equal access of men and women to funding for adaptation projects is important and supports an approach that includes the entire community and draws on the strengths of its members.

These changes to the workshops have had several positive impacts:

- The children's workshops and catering provided allow both female and male farmers to focus on the workshop content while having their needs, such as food and child care, attended to.
- The workshops perform an important social function and provide a safe space for interaction and sharing among women, who are often isolated on their farms.
- Women who want to play a larger role and be involved in the farmers' co-operative have been able to establish themselves as voices of authority.
- Women can enjoy the process of building self-confidence and having their contributions taken seriously in an engaging and enthusiastic environment.

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## See also

*Gender and Climate Change Adaptation*, by Wendy Annecke, Indigo Development & Change, South Africa, 2010  
<http://bit.ly/fQvpGV>



## Join the AfricaAdapt network

AfricaAdapt is an independent network in French and English, focused exclusively on Africa. The aim is to facilitate the flow of climate change adaptation knowledge for sustainable livelihoods between researchers, policymakers, civil society organisations and communities who are vulnerable to climate variability and change across the continent.

[www.africa-adapt.net](http://www.africa-adapt.net)  
[info@africa-adapt.net](mailto:info@africa-adapt.net)



# Women adapt in southern Togo

## Case study

Women from the Gbénondou group undertake training on the selection of certified seeds in Davié Tékpo, southern Togo © AFHON 2009

**Women have been absent from debates on climate change for a long time, because men did not ask for or consider their views. However, women can and do contribute to innovative solutions to the problems caused by climate change.**

One example is the Gbénondou (meaning 'one voice') group in Togo, composed of both women and men. To provide information about climate risks and to seek possible adaptation options, the Actions en Faveur de l'Homme et de la Nature (AFHON) association undertook a pilot project to support the Gbénondou group.

The project aims to help members to develop reliable agricultural techniques to deal with the challenges caused by climate change. Women are particularly targeted by the project, because they have until now always been left out during training programmes.

### Challenges

The women in the group farm in Davié Tékpo village in southern Togo. They acquired the land through leasing, since they do not own land. In addition to the common problems of farming in poor areas (such as low technical capacity, little equipment, and difficulties with land availability and access), critical weather variability has had major effects on the local community.

A major issue is the irregularity of rainfall. This contributes to the degradation and loss of farmland, and soil erosion increases during periods of intense rainfall. Other climate-related problems include increased exposure of crops to pests and diseases and a decline in the resilience of seeds to extreme weather.

Women are actively involved in agriculture in the village, which is their only source of income. Men are generally tradesmen involved in carpentry, public service, transport and masonry. Women sell products from the fields, so if climate change affects their crops, their business is also affected. Thus, women are more vulnerable to climate vulnerability.

### Field schools

An AFHON technical team, with the support of Institut de Conseil et d'Appui Technique, a national institute specialised in providing advice and technical support in agronomy, organised field schools and demonstration units. Women were trained in the production and provision of certified seeds and taught about agricultural diversification options, such as breeding animals. These have had many successful outcomes, all of which have improved the living standards of group members.

- After attending the field schools, most women agreed to adopt new innovative techniques.
- Each family has increased its cropland area by 2 or 3 hectares.
- Output per unit of land has improved from 1.5 to 3.5 tons per hectare.

The success of this initiative demonstrates how women are important and must be included in the solutions to climate change. The project also highlights several adaptation measures that other farming groups in the region could adopt:

- rotate crops to effectively fight against crop pests and the degradation of arable land
- adapt planting seasons and crops to rainfall patterns by establishing strong hedgerows and windbreaks; this protects farmland against

water erosion in heavy rains and also wind erosion

- introduce species such as *Leucena lococephala*, *Samanea samane*, *Mucouna* and *Caesalpinia pulcherima*; these capture atmospheric nitrogen and convert it into a form of nitrogen that other crops can take up.

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## See also

Q&A: "Incomprehensible" Absence of Women in Global Environment Policy, Terraviva Online, 2010  
<http://bit.ly/fSMRTN>

Gbénondou group pilot project  
<http://bit.ly/hKC63J>



## Join the Joto Afrika debate online

**Joto Afrika Eldis Community Group:**  
<http://bit.ly/bM3E5o>

**Joto Afrika Facebook Group:**  
<http://bit.ly/aMNLth>



# Cameroonian women take the lead in climate change adaptation

Interview with Gilbert Njodzeka,  
Green Care coordinator

Gilbert Njodzeka, Green Care coordinator © Green Care Shisong, Cameroon, 2011

***In Joto Afrika 2, we read how Green Care, an environmental organisation in Bui Division of north-west Cameroon, organised reforestation projects with local villages to conserve water. In these projects, communities work together to plant local species around water catchments and springs. Women, who are responsible for collecting water in each community, are a key part of these projects. We got in touch with Gilbert Njodzeka, Green Care's coordinator, to find out more...***

**Gilbert, you told us that women participate in sensitisation meetings and tree planting activities. Can you tell us how women are involved in these activities?**

In each community water catchment project, women are members of the managing committee. We (Green Care) have been working with these women to influence communities to turn out for work. These women educate fellow women in their many local groups about the importance of conserving existing trees and planting more water catchment-friendly trees. This is a fairly new approach within our area and women are at best at spreading information once they are convinced.

**Green Care insists on women being involved in community tree planting activities. Can you explain why?**

Green Care believes that women are the best channel to educate the community. Considering that our women are always in the farms, we realised that convincing them to plant trees and conserve existing ones is a big step to successful education of the community in conservation programmes. Because most of our tree planting programmes are around water catchment areas to help stabilise water sources, Green

Care focus on women's involvement as they are the main users of water within our communities. Women draw water for household use, so Green Care know the struggle they go through to carry water.

Women facilitate the distribution of trees to be planted and are always there to sing motivating songs and provide food during community tree planting programmes.

**What roles do men play in the projects? How are these different to women, and why?**

Men load trees on and off trucks, at the nursery and the planting sites. They also clear and dig holes in planting sites. This is because men are considered fit for harder labour. Further, men are responsible for providing drinks during planting and planning tree planting days.

**Are women keen to get involved? If not, how do you encourage them to take part?**

Women are keen to get involved in the tree planting programmes but only when they are educated about the project input and outcome before the work day or project begins. Educating women is done during their many group meetings within the communities concerned.

**Do women benefit from the tree planting in terms of income?**

Women do benefit indirectly in that areas where trees are planted are always used as bee farming sites to raise income for the water management committees, who in turn use the income to maintain the water supply schemes. Also, some women are beginning to develop an interest in developing their individual bee keeping farms as a source of income by planting trees in carefully selected sites..

**Have you encountered any challenges to women being involved in your conservation projects?**

Our greatest challenge in getting women involved in conservation work is lack of motivation. Others include transporting women to project sites and difficulties in having enough awareness programmes about climate change and income generation. There is hardly enough money to pay for announcements over local community radios.

**What other challenges do the gender awareness aspects of your projects have?**

We still have difficulties convincing our youths about the importance of trees and the need to plant. Some men and youths are still talking negatively about tree planting as they try to discourage others, saying that trees take too long to be valuable. We still have too few demonstration sites to display to communities the value of tree planting in water catchment sites, so there is still some resistance and many questions about tree planting.

**What advice would you give to other community groups who are keen to encourage more women to get involved with environmental projects?**

Projects like this need to be handled by elected women leaders. There is also a need to educate these leaders carefully about the benefits before talking to other women. This is because women tend to respond to their leaders' desires. There is also the need to exercise some patience in all conservation work.

**Gilbert Njodzeka**

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# How gender affects vulnerability to climate change in rural Namibia

## Research summary

Most women walk for long distances in search of firewood  
© e-iwm.wikispaces.com, 2003

**Vulnerability to climate change is complex. It is shaped by social, economic, ecological, institutional, technological and governance processes. Climate change also impacts on men and women in rural areas.**

As the climate changes, the exposures and risks people face also change. Experiences of current exposure to climate-related hazards suggest women are more vulnerable than men. But historically, both men and women have particular social disadvantages that make them vulnerable to climate change.

Research conducted in rural communities in Namibia shows that the different impacts experienced by men and women arise from the unequal distribution of roles and responsibilities. The research focused on two communities: Epyeshona village in northern-central Namibia and Daures Constituency in the north-western region.

People in Namibia's rural settings have strong links to the environment and climate-related variables. The communities in Epyeshona that practice subsistence crop and livestock farming have a stronger link to the environment and are more affected

by climate than those in Daures. An activity profile assessment revealed that women in this area interact with the environment more than men because they are expected to maintain household food security. They have to farm, go to the market, and fetch water and firewood.

The environment in Daures is drier. The availability of rangelands for grazing is a key environmental variable in this area. Livestock rearing, the main source of livelihood, is mostly done by men hence they are comparatively more affected by effects of climate change.

However, women lack technical skills to participate in formal employment and therefore engage more in informal economic activities such as collecting water and fuel wood. These are also negatively impacted by climate change. The environmental conditions in Daures do not offer many opportunities for women to participate beyond their household chores.

### Responses to climate change variability

As the climate changes and affects livelihoods, men and women in the two communities are adapting in different ways because crop and livestock farming their main livelihoods are compromise.

- Women in Epyeshona village engage in basketry, processing of marula nuts and oil and selling chickens, pigs or goats.
- In Daures, farmers are starting to mine semi-precious stones on a small-scale basis. Women assist men by selling semi-precious stones to tourists.

### Recommendations

There is a need to understand the historical and social disadvantages of both men and women, and how these affect their ability

to cope with current climate variability. This will impact on their ability to adapt and build resilience to climate change.

- Government officials and decision-makers need to ensure that rural women are also involved in decision-making. This will lead to more successful programmes that enable rural communities to build resilience to adverse climatic conditions.
- Both men and women need support to empower them to excel in agriculture. They require appropriate labour-saving technology, seeds that can withstand different climatic conditions, and financial capital.
- People in Epyeshona village should diversify into more income-generating activities such as sewing, brick-making and selling crafts items.

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## See also

*Gender and Climate Change: Namibia Case Study*, Heinrich Böll Foundation Southern Africa, Margaret Angula, 2010  
<http://bit.ly/hqGEb3>

**Do you want to be a guest editor for Joto Afrika? Future issues will look at climate change and pastoralism, and climate change and energy.**

Send us your CV and cover letter – contact details are on **page 8**.



# Changing gender roles due to climate change in northern Kenya

## Case study

A male pastoralist fetches firewood in Mandera, Kenya  
© Ayub Macharia, 2009

**Climate change is not gender neutral; men and women in many communities interact with their physical environment in different ways. Vulnerability to the impacts of climate change also varies between men and women, for example in pastoral communities.**

Climate variability and change (such as higher temperatures and irregular rainfall) reduce pasture and water, leading to animal loss through hunger and disease. This has been worsened by climate-induced conflict resulting from resource competition among pastoralist groups of land users. The risk of conflict is significantly greater during times of stress, for example during drought or floods, when available resources are even more restricted.

Men are particularly vulnerable to the direct risks from climate-induced conflicts over water, pasture and cattle. Among pastoralists, livestock are very important and a person's social status is defined by the amount of livestock he has. When men lose their animals, they also lose their social status and decision-making power.

### Alternative livelihoods

The loss of animals threatens the pastoral system. It creates hopelessness among pastoralist men and forces them to seek alternative livelihoods. Many have migrated to cities to look for jobs, but the majority do not have the right skills for professional jobs. Instead they end up working in low-paid jobs like security guards. This has led to a decline in self-esteem and a feeling of hopelessness because of the loss of social

status, from being a rich pastoralist and decision-maker within the community to doing manual jobs in cities.

In pastoralist communities, marriage involves the payment of a dowry to the bride's family. However, many men no longer have enough livestock for this and opt not to get married. This results in a breakdown in family structures and an increase in female-headed households. Female-headed households are vulnerable if they have no male members to herd livestock; the local culture limits their decision-making and ability to own assets.

Men's roles within the community are also changing. Traditionally, it was women's role to collect water and firewood. However, during extreme droughts men are involved in fetching water and firewood, especially where the areas are prone to conflict. Men mostly use donkeys while the majority of women carry firewood and water on their heads or backs, so men tend to fetch firewood and water in greater quantities. This means that some can be used within the family and men can sell the rest.

### Recommendations

It is important to recognise the gendered impact of climate change on pastoralists and strengthen their existing coping strategies. Possible responses include:

- The movement of pastoralists in response to climate variability reduces pressure on pasture and water, both locally and internationally. This should involve inter-government agreements.
- The governments should develop early warning measures to predict droughts and inform pastoralist communities.
- The Kenyan government should buy animals before droughts to reduce animal loss and provide the pastoralists with money to restock their herds after droughts.

- Governments in countries with pastoralist communities must put in place security measures to protect pastoralists from cattle raiders.

### Nancy A. Omolo

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## See also

'Gender and climate change-induced conflict in pastoral communities: Case study of Turkana in northwestern Kenya', by Nancy A. Omolo, pages 81-102 in *African Journal on Conflict Resolution*, Volume 10(2), 2010  
<http://bit.ly/edj3rg>

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Organisations and individuals in Africa can receive a free printed copy of the briefings. Each issue will also be available on the ALIN website ([www.alin.net](http://www.alin.net)).

You can subscribe by sending an email to [jotoafrica@alin.net](mailto:jotoafrica@alin.net). Please include your organisation and your full postal address. You can also subscribe and send feedback via SMS to **+254 717 032322** and start with the word Joto.

Future issues will focus on pastoralists and energy. Please tell us what you think about this sixth issue of *Joto Afrika* and what you would like to read in future issues – contact details are on **page 8**.

# Letters to the editor

We welcome your feedback on this sixth issue of *Joto Afrika*. Please send us your thoughts using the contact details on **page 8**. Please include your full contact address or email. A selection of letters will be printed in the next issue. Letters may be edited.



## Dear Editor,

Thank you very much for *Joto Afrika* issues. Issue 4 on forestry was great! It is the core of what we do and we have used it to implement various projects. We have also shared *Joto Afrika* with different community-based groups, organisations and schools in Rift Valley, Kenya. We would also like to inform you that we got the innovation fund from AfricaAdapt that we read about in *Joto Afrika!* from the link provided, we visited the AfricaAdapt website and saw the call for innovation and applied.  
Long live *Joto Afrika!*

Thomas Gichuru  
Tree is Life  
Kenya

*Editor: Thomas, It is great you find the newsletter useful. We are also happy that you got the innovation fund through our newsletter. We would like to get feedback from the groups you work with on what they think about Joto Afrika as well.*

## Dear Editor,

This newsletter looks very useful – compliments to the team on how they've managed to present one item on each page. Can I use it as a model when I do training courses?

Paul Mundy  
Development communication specialist  
Germany

*Editor: Paul, we are pleased you like the newsletter, please go ahead and use it and ensure you acknowledge the source.*

## Dear Editor

Thank you for the fourth issue of *Joto Afrika*. I am very interested in the effects of climate change and mitigation. Please continue briefing us more on agriculture, pastoralism, gender and human health.

Eliud Msigwa  
Tanzania

*Editor: Eliud, I hope you have found this issue on gender useful. We plan to feature pastoralism in our next issue (June 2011), so please look out for that as well.*

## Dear Editor,

The publication is nice and I like the perspective (issue 5) has taken on malaria. I would have liked to read something too on the impact caused by the use of DDT in the control of the Anopheles mosquito and whether it is has any contribution towards the current climate change on health.

Gerald Cosmas Yongo  
Kenya

*Editor: Thank you for the follow up question, please feel free to ask the author of the article for further information. Use the contacts below the article. We will also forward your question to him.*

## Contribute to *Joto Afrika*

Do you want to tell people how your community is adapting to climate change? Are you involved in a programme, project or research that is helping people to find practical solutions to cope with the effects of climate change? We want your contributions for *Joto Afrika*!

We are looking for research work, community case studies, videos, audio clips and photo essays about climate change adaptation across sub-Saharan Africa. The case studies need to be short (no more than 600 words), easy to understand and provide practical information for other people facing these problems. We welcome contributions in French and English.

If you would like to contribute, please contact the editor at [jotoafrika@alin.net](mailto:jotoafrika@alin.net)





# Tackling climate change ward by ward

## Case study

Women in Lindi, Tanzania, have to walk long distances to fetch water from caves  
© Yusuf Badi/British Council

**Climate change is impacting populations and ecosystems around the world, but people with the fewest resources are most susceptible – particularly women, the majority of the world's poor.**

In most parts of Tanzania, women participate in crop and livestock production, and engage in off-farm activities to diversify the family income. They also provide food, water and fuel for their families and care for children, elderly people and the sick.

Flora K. Munyasya, a student at the Institute of Rural Development Planning in Tanzania, conducted a survey in Bahi-sokoni village (Bahi District, Dodoma region). She looked at how households access their basic needs – fuel wood, water, food, education and health. The study showed that women and girls in the region contribute more than 70 percent of a household's time and efforts for domestic and farm activities (including land preparation, crop sowing, weeding and harvesting). The survey also found that:

- 85 percent of all travel is done by women; 15 percent is by men and children.
- 80 percent of all journeys are for transporting water and fire wood and travelling to the grinding mills.

- 95 percent of this transportation is done by foot and head-loading.

Climate change is affecting many of these activities. Previously, the area had reliable rains, and water and fuel wood were plentiful nearby. But recent severe droughts have caused many problems.

The prolonged drought has led many people to abandon their traditional farming livelihood, of food crops and cattle breeding, to earn a living making charcoal and clay bricks. The felling of trees for these activities leaves women with even longer distances to walk in search of firewood, meaning yet more hours each day on the road, reducing their productive hours. Where there is family transport, for example a bicycle, men and boys dominate the use.

Collecting water has also become more difficult. Some livestock keepers are reluctant to destock their animals and switch to alternative activities, since owning large herds is a sign of wealth. The lack of destocking causes overgrazing, which results in the destruction of possible water catchment areas. This, together with the long droughts, has caused a water shortage in the region. This has again left women with longer distances to collect water.

### Facing the effects

Faced with these problems, the community decided to act. Members of Dodoma Environmental Networks (DONET) helped the community to form four Ward Environmental Networks. Each ward comprises two to five villages. To ensure effective coordination of the networks, the members formed the Bahi District Environmental Network.

After identifying the predominant environmental problems in their ward, network members developed work plans to guide them in efforts to resolve these problems. Establishing and managing tree nurseries is the priority in each ward. The next step is tree planting around homesteads and establishing forests in reserved areas of each village. The network hopes that these efforts will gradually minimise the harmful effects of climate change in Bahi District.

DONET is interested in exchanging experiences with other organisations and communities on counteracting the effects of climate change.

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Article adapted from the Dimitra newsletter

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