



WWF

ESD

A close-up portrait of a young girl with dark skin and hair, smiling gently at the camera. She is wearing a brown school sweater over a white collared shirt. The background is filled with large, vibrant green banana leaves, and the faces of other children are partially visible behind her.

**Education for
Sustainable Development
as a part of conservation**

Education for Sustainable Development as a part of conservation

Sustainable development is one of the biggest challenges mankind has ever faced. If we want to achieve sustainable development everyone must participate. This will require lots of learning. We need knowledge, values and skills to participate and contribute to reach a more sustainable future. Education has an important role to play in building this capacity. Schools can be important vehicles of change and learning and can reach out to parents and other community members.

WWF goals to reverse the negative trends of declining biodiversity and increasing ecological footprints call for transformational change of our societies. This will demand us to reflect, rethink and reform our understandings, attitudes and behaviors.

Why education?

Education can be a major force for transforming society and education and could be a powerful tool to reach our WWF goals. We are living in a global and complex world and the planet and its people are facing gigantic challenges; climate change, reduced biodiversity, increased ecological footprint, poverty, war, hunger, refugees, inequality etc. Education can deepen knowledge, develop key skills, can be a learning arena for the whole society and can be a trampoline for disseminating important knowledge. If we take into account that pupils communicate what they have learned in school to their parents and relatives, the estimation is that between 50-70% of a country's population can be reached.

How?

How can we develop education into a direction that supports sustainable development? One answer is to work in the tradition of Education for Sustainable Development ESD; to develop knowledge, skills, action competences and a school that takes a holistic approach; A Whole School Approach.

What is ESD?

In December 2002, the United Nations General Assembly proclaimed the UN Decade of Education for Sustainable Development (DESD), 2005-2014. The Assembly highlighted the role of education as crucial for achieving sustainable development. The importance of education when dealing with SD challenges is obvious.

Education for Sustainable Development ESD embraces the three dimensions of development that are vital for human survival and the well-being of nature: ecological, economic and social/cultural development. In other words, learners should problematize connections between environmental protection, economic growth and social development, and link these to thematic topics such as natural resources for an increasing (global) population, international understanding, peace, human rights, gender equality, poverty alleviation and cultural diversity.

The Chair of Sustainable Development

The chair of sustainable development has four connected 'legs' of sustainability and all four legs have to be included in policy and management for sustainable development. If one leg is over-emphasised, the chair will be unstable and uncomfortable.

This is a school in Kenya where, among other things, the students grow tomatoes in a greenhouse. The cultivation creates many added values: food security, incomes to the school, skills like cooperation and creativity, knowledge about cultivation, increased motivation among students and teachers, better academic performance and the school is considered as a learning centre for the whole community.



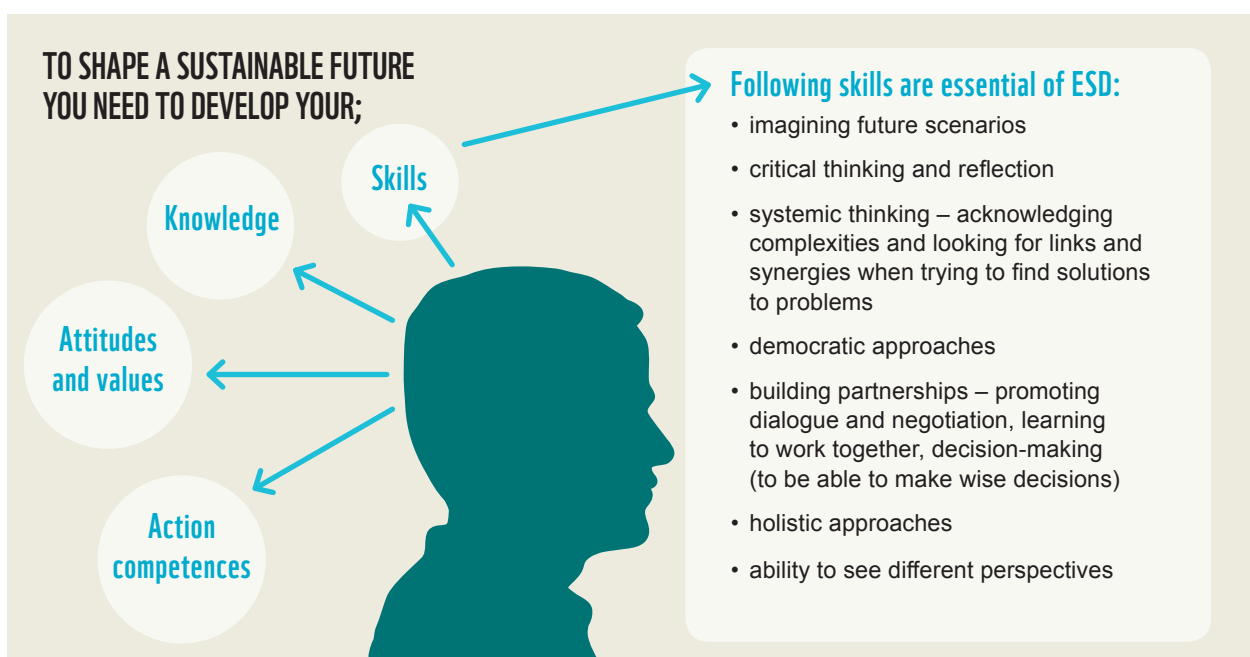
Action competence

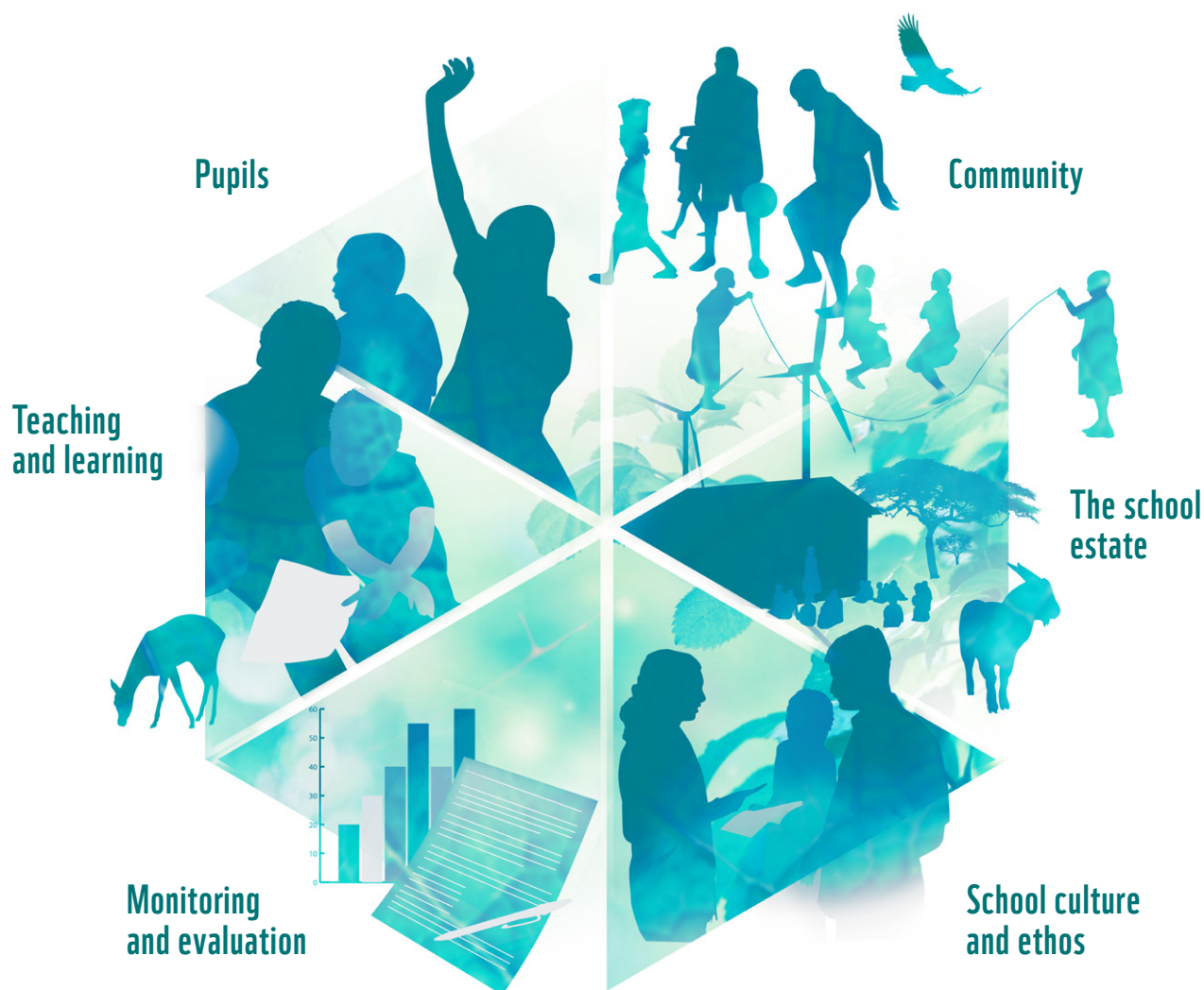
You have developed an action competence for a sustainable future when you feel that you are motivated, you have the knowledge and some possibilities to act.

Knowledge is about possessing pure facts, practical skills, a deeper understanding, being well informed and wisdom – in short, what we know.

Opportunities depend on the existence of different alternatives and possibilities – we can do it!

Motivation is an inner driving-force that compels me to act or change. I have a particular idea – I want to do something – and I see the opportunities that exist.





Examples of key development issues in ESD teaching and learning:

- climate change
- biodiversity
- water supply
- poverty reduction
- sustainable production and consumption
- sustainable lifestyles
- poverty
- gender
- health issues

Whole School Approach

This picture above illustrates Whole School Approach in Education for Sustainable Development, ESD. To develop a school in a sustainable direction is not just about teaching. It is also about developing a school culture characterized by participation. To go out in the real world by working with the surrounding, local environment is also important and develop the schoolyard to be a learning environment.

School culture and ethos: This development area is about making sure that everybody participates; all staff, all students, parents and the community. It also regards how ESD is embedded in the schools plans, policies, operation, mission and values.

The School estate: To transform the school grounds from bare land into green areas full of trees, grass and flowers and turned them into learning environments and learning centres.

Community: How can the school cooperate with the community? It provides rich opportunities for reality based learning where students can contribute.

Pupils: Give the students the freedom and support to make simple and complex choices.

Teaching and learning: How can we interpret or see the curriculum through ESD glasses? This is a key area in whole school approach.

Monitoring and valuation: The school is a learning organisation and uses a cycle of planning, acting, observing, reflecting and revising to develop good practice.

EXAMPLES:

How ESD contributes to achieving our nature conservation targets

WWF Sweden is cooperating on the ESD arena together with different countries in Africa and Indonesia. We are working in formal education – today we cooperate with 134 ESD model schools. We are also working in non-formal education; youth groups, youth entrepreneurs, youth networks, women groups and communities. We bring our good results to a higher policy level and try to give contribution to curriculum development.



Madagascar

Students learn entrepreneurship and green business

Through green economic activities, students have learnt entrepreneurship and green business. In the Mahafaly landscape for example, students have yam and sorghum field and promote their plantations to fight against starvation in their communities. Students in Ankilimalinike learn sustainable agricultural techniques and grow, for instance, cotton culture without the use of pesticides in the school yard. This is also the opportunity for them to acquire democratic and action competencies skills to be able to take an active part in engaging with the CBOs in charge of managing natural resources.





Sustainable Communities

(or ESD villages) idea is that you connect a holistic approach to sustainability issues. It is a concept that helps communities to take responsibility of their natural resources and also improve on their livelihoods. Different groups of people in the community as farmers, women groups, businessmen, fishermen, teachers, schools etc. cooperate to reach a common goal.

There are six developing areas:

1. Holistic approach
2. Governance, structure and follow up
3. Education and learning
4. Cooperation and partnership
5. Management
6. Innovations



East Africa

ESD villages have mainstreamed sustainability in their activities

Nine established ESD villages in the Lake Victoria catchment have mainstreamed sustainability in their activities which has led to improved conservation of the catchment area. In Rwanda the ESD villages have also been recognized by the local governments as models for sustainable natural resource management.

The two ESD villages in Rwanda have increased tree cover by planting 8,000 agro forestry trees and 600 fruit trees. The Kigende ESD village members, after having piped water, are now paying a maintenance fee for the water channel coming from a spring. In Kenya after the communities were trained on natural resource valuation, they are engaged in active conservation of natural resources in their areas to include the water springs in Enego village in Nandi Hills, soil and water conservation in Lieta Kabunde in Homabay, as well as forests conservation in Transmara and Nandi. The ESD village community members in Nandi Hills are involved in forest conservation and springs protection. They have also rehabilitated water points.

Soil conservation

The Lieta Kabunde ESD village members in Homa Bay are involved in soil conservation through rehabilitation of degraded sites to control soil erosion while at the same time promoting afforestation which has promoted soil conservation and increased tree cover.

Beekeeping helps to caring for nature

In Transmara region in Kenya, the beehives established by the youth groups have led to the conservation of the ecosystem. This is due to a decline in deforestation as the communities have stopped cutting down trees for charcoal burning as was their practice before.

Energy saving stoves promote energy conservation

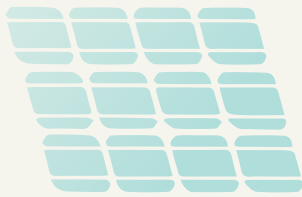
The community members of the ESD village in Nandi Hills are promoting energy conservation by using of energy saving jikos (stoves) such as Kuni moja jiko (one piece firewood stove) and fireless cookers.

Solarpanels reduce the ecological footprint

One school in Uganda was supported to have solar for lighting which will help to reduce energy costs and reduce the school's footprint.

Improved cook stoves reduces deforestation

In Uganda one ESD village was supported with 75 improved cook stoves that are leading to a reduction in the amount of trees being cut for fuelwood. The community co-financed the project whereby WWF provided only 65 per cent of the funds and the community raised the rest through their community savings bank initiative which will continue to serve as a sustainability tool for them.



Solar panels reduce the use of firewood

In Rwanda, all households within the programme in the Kigende ESD village are using solar for lighting, a practice which is promoting the use of clean energy and reducing on use of firewood for lighting in the evening.

Indonesia

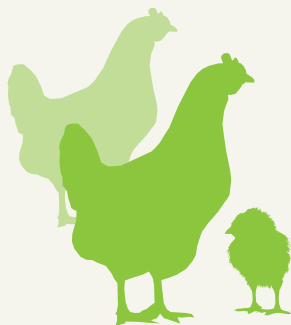
Local resource Management Efficiency: An Approach to restoring intelligence and wisdom of rural communities

Mekartani village has a thick peat soil. In the past there was a commercial value of tree crops like ramin, meranti and jelutong. With an increased number of timber companies, entry of illegal loggers and the government project “a million hectares of land clearing” (the government will prepare agricultural land for national food security) the landscape has been very open and is now overgrown with grass, weeds and shrubs which are removed by using herbicides.

Farmers who have cattle and goats need grass to feed their livestock. The people spent too much time cutting the wildgrass. With the EDS assistance in Mekartani elementary school, the community agreed to make animal feed by fermentating of grass and shrubs. The village used a chopper machine to make the fodder from natural resources of grass and shrubs that were available in the villages. First they chopped the grass and put it into an airtight barrel to be fermented. This feed experiment aroused great interest. **Some positive outcomes:**

- » The number of cattle increases significantly
- » A farm can be a source of sustainable livelihood
- » Farmers have time to think about other things and conduct more productive activities
- » Farmers can obtain environmentally friendly energy sources that are sufficient and sustainable
- » Farmers can produce fertilizer in a financially good way
- » Weeds which have been regarded as a problem can be converted into something good
- » The use of agricultural chemicals (chemical fertilizers, herbicides, pesticides) can be removed, its means that farmers do not need to spend money on agricultural chemicals and the pollution of the environment is reduced
- » Local Resources can be managed sustainably.

Cameroon



Green businesses reduce community pressure on wildlife resources

Students in the Bakossi Landscape have been able to transfer the knowledge and convinced their parents to adopt poultry and piggery, an effort which is testified by ESD Teacher Coordinators and community members to have considerably reduced pressure on wildlife in the area. Pilot schools produce chicken and supply to women who now sell chicken pepper soup that has outcompeted bush meat pepper soup.

Pilot schools influence community decisions on natural resource management

Students in the Bakossi Landscape have been engaging parents in discussions during community meetings and environmental campaigns regarding the necessity for conservation and sustainable management of their limited natural resources.

A transformation of a poacher and starting of a poultry business

The students of Government High School Nyasoso in the Bakossi Landscape were able to employ an innovative strategy to transform a hard-core poacher into a green business entrepreneur (poultry farmer). This man has since abandoned poaching and is a source of inspiration for poachers in the area.

Another good example from this school is a parent who, after regular visits to and observation of the green business initiative of the schools, started his own poultry business and has been disseminating this idea and supplying chicks beyond the Nyasoso village community.

A pilot school introduces a culture of proper waste management

Government Teacher Training College Bangem, through a series of clean-up campaigns, has succeeded to introduce a culture of waste management in the Bangem community. This community that was once dirty now has many households with trash cans that separate waste materials into biodegradable and non-biodegradable. The surrounding has suddenly transformed into a clean environment worthy of emulation.

Lamu, Kenya

Cleaning beaches help turtles

In ESD, we create awareness in schools and to Beach Management Unit (BMU) on several aspects of turtle and general marine ecosystem conservation. We have created partnerships between schools and the BMUs who clean beaches to enhance both turtle conservation and clean fish landing sites.

Beach Management Unit members, Members from Eco-tourism Youth Group and Women group in training in sustainable utilization for marine resources of Kiwayuu Primary School





How can we develop cooperation between the ESD area and the Conservation field?

► Prepare youth to be change agents

ESD should be a tool to prepare and change people (decision makers, partners, key actors, beneficiaries, communities, youth, etc.) to be able to act to achieve conservation and sustainable development goals. For the next five years, Madagascar, in our conservation plan, WWF target youth and youth movement to become a change agent and to change the community behavior through ESD. Three steps may be suggested to really make the connection between ESD area and Conservation area:

A. Prepare youth at school level to acquire the skills, knowledge to be able to take action, and the values to change and to infuse change in their communities: capacity building, promotion of green economic activities:

- » Prepare students to become a peer educators
- » Use the school as a learning center for all

B. Mobilize youth in the community (students or out-of school youth):

- » Create the opportunity for students to mobilize their peers through raising awareness and communication activities such as radio broadcasting, interviews, etc.
- » Reinforce youth clubs and their networks as a nursery for civil society organization to foster change / introduce innovation in their community
- » Involve youth to carry on environmental activities in collaboration with WWF field team : reforestation, ecological monitoring, collect of climate witnesses, study and research
- » Reinforce their capacity to hand over and to ensure the sustainability of WWF' impacts.

At regional and national level, give the opportunity to youth movement to network, to raise their voice, to share their concern and to take active part into the emergent civil society to deepen and strengthen their action at a higher level of decision making (policy level).

► Increase understanding amongst WWF staff on ESD

As a starting point, there is a need for ESD teams to organize meetings with conservation teams during which particularly ESD results that demonstrate ESD contribution to conservation are presented. It might be necessary for field trips to follow such meetings in order for the conservation teams to see the reality in the field, as they will have the opportunity interviewing of students and community members to validate, and be convinced by, the results presented during the meetings.

During such meetings, it would helpful to stress the need for bio-monitoring results of target protected areas to be presented to ESD teams and pilot schools in order to encourage their efforts in conservation.

► Consider ESD villages as a strong investment

ESD villages have set standards for the rest of the communities to emulate hence making the concept of ESD villages one of the best sustainable development innovations at ground level with the communities. Such innovations include proper waste management, water harvesting and conservation, tree planting and growing, kitchen gardening, energy conservation, organic farming, good sanitation and hygiene practices, good leadership and governance, holistic approach and participation, education and learning, cooperation and partnership and innovations.

"The most important task, if we are to save the Earth, is to educate."

Sir Peter Scott,
founder of WWF



► The importance of knowledge on sustainability

Once a community understands well the principles of sustainability, it can influence the planning and governance of natural resources. This was learnt during the establishment of ESD villages in Rwanda whereby the community members in a meeting with the local government were able to set and present their objectives towards transforming their villages into sustainability villages.

Nkozambogo Youth Group members in Masaka, Uganda, for example, have advised community members to stop the practice of collection of Grey Crowned Crane eggs in the Lake Birinzi wetlands and also become advocates of the conservation of the endangered Sitatunga.



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▶ Youth Leadership Programme

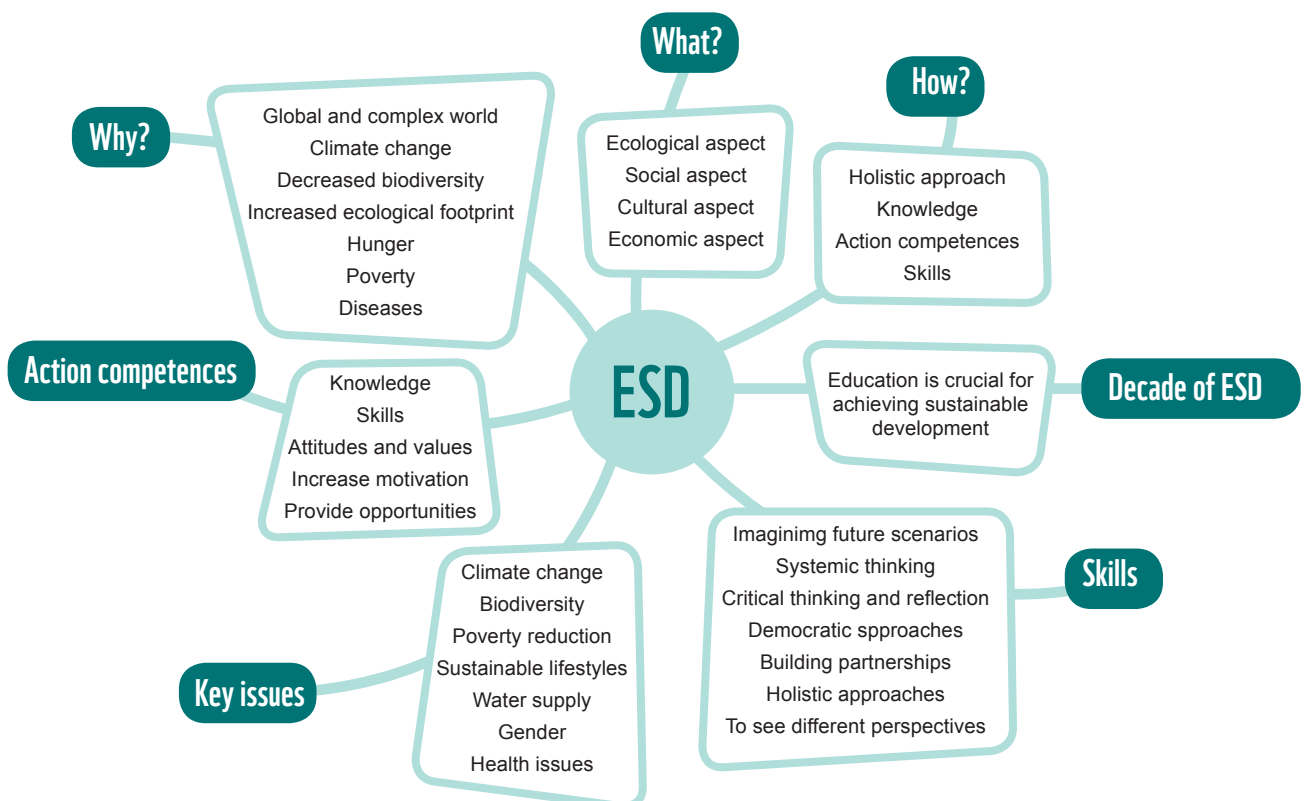
The Youth Conservation Leadership programme coupled with policy advocacy skills has led to the youth now promoting conservation through focused advocacy for their rights and those of the biodiversity they live with.

The youth are now paying attention to conservation issues and have become stewards in fostering conservation.

Conservation leadership training has also triggered initiatives as tree planting, renewable energy use, waste separation and disposal. Empowering the youth has led them to confidently take lead on issues in their communities, for example, in Rwanda the youth have taken lead in the establishment of ESD villages.

▶ Incorporating ESD in conservation strategy

ESD can be a strategy in achieving conservation objectives in our programs. We are currently developing a Conservation Action Plan for Coastal Kenya. We have identified ESD to be a strategy in responding to four threats. Under the sustainable fishing and sustainable natural resource use, it comes under Community Based Natural Resources use (CBNRM) or capacity building.



Some examples of how ESD contributes to achieving our nature conservation targets

MADAGASCAR

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LAMU, KENYA

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CAMEROON

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EAST AFRICA

ESD villages in the Lake Victoria catchment have mainstreamed sustainability in their activities, which has led to improved conservation of the catchment area.

INDONESIA

An ESD community makes animal feed by fermenting of grass and shrubs. Farmers produce fertilizers in a lucrative way while ensuring that environmental pollution is reduced.



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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