



BIODIVERSITY & YOU

The title 'BIODIVERSITY & YOU' is rendered in large, bold letters. 'BIODIVERSITY' is in dark green, while '&' and 'YOU' are in bright yellow. The letters are set against a background of faint, light-colored leaf silhouettes. Below the letters, several silhouettes are arranged: a person on the left, a person in a dynamic pose in the center, a person on the right, and a person jumping on the far right. A bear silhouette is perched on the letter 'U', and a rabbit silhouette is on the number '13'.

START A PROJECT TO HELP PROTECT
BIODIVERSITY YOURSELF!

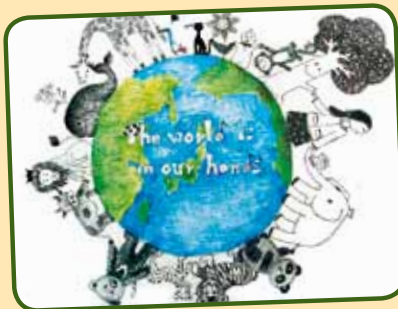
Jennifer Corriero and Ping-Ya Lee, TakingITGlobal

After reading this guide and learning about the importance of **biodiversity** and the threats to biodiversity, get ready to take action on the issues that matter most to you. Young people around the world are leading successful projects to protect and restore the biosphere. **Now it's your turn to take action:** learn the six simple steps that you can take to start an action project that will help to ensure that the world's biological resources are protected for future generations.

Be inspired by case studies of a youth-led reforestation initiative in Kenya and an international network of young, organic gardeners recognised at the 2009 Global Junior Challenge in Rome, Italy.

Read examples of many other projects that attendees of the Youth Symposium for Biodiversity are leading.

And **find out more** about the six simple steps that you can take to start an action project that will help to ensure that the world's biological resources are protected for future generations.



"THE WORLD IS IN OUR HANDS" BY BETTY PIN-JUNG CHEN, 1ST PLACE WINNER IN TAKINGITGLOBAL'S 2009-2010 IMPRINTS ART CONTEST.

"I hope people can love our only planet more. Think of the Earth as an egg; hold it in your hands carefully so you don't break it. The Earth is like that, we need to protect it, and love it for the next generation and the rest of our lives."

*Betty Pin-jung Chen,
age 13, Taiwan*

SIX SIMPLE STEPS TOWARDS CHANGE

These *Six Simple Steps Towards Change* have been adapted from the *Guide to Action*, created by TakingITGlobal, in consultation with young global leaders from around the world.

You can use these steps to help you to plan and execute your own biodiversity project:

1. **REFLECT AND GET INSPIRED**
2. **IDENTIFY AND GET INFORMED**
3. **LEAD AND GET OTHERS INVOLVED**
4. **GET CONNECTED**
5. **PLAN AND GET MOVING**
6. **HAVE A LASTING IMPACT**

REFLECT & GET INSPIRED

Think about the changes you would like to see happen, whether they are in yourself, your school, your community, your country, or even the world. Who or what inspires you to take action? Seeking out sources of inspiration can give you great ideas and help you to find the strength to turn your vision into reality.

HAVE A LASTING IMPACT

Monitoring and evaluation are important parts of project management. During and at the end of your project you'll want to identify the obstacles you face and the lessons you are learning. Encouraging other youth to get involved in the issue you care about is a great way to sustain your efforts. Remember, even if you don't achieve all of your expectations, you most probably influenced others and experienced personal growth!

PLAN & GET MOVING

Now that you are equipped to take action, it's time to begin planning. Start with identifying the issue you are most interested in taking action on and one goal you can work towards. When you have your plan, stay positive and focused. Encountering obstacles is normal. You will learn a great deal more from overcoming obstacles and challenges.





IDENTIFY & GET INFORMED

What issues are you most passionate about? Learn more by gathering information about the things that interest you. By informing yourself you will be prepared to tackle the challenges that lie ahead.

LEAD & GET OTHERS INVOLVED

Being a good leader is about building on the skills you have and knowing how to leverage the strengths of others. Write down the skills that you and your team members have and see how each member of your team can use their strengths to lead in different ways. Remember that good leadership includes good teamwork!

GET CONNECTED

Networking can give you ideas, access to knowledge and experience, and help in gaining support for your project. Create a map of your networks and track your contacts.

STEPS FOR CREATING A BIODIVERSITY PROJECT.

Source: *Guide to Action: Simple Steps Towards Change*, TakingITGlobal, 2006

1. REFLECT AND GET INSPIRED

Reflect on your passions

Take a moment to **REFLECT** on the biodiversity issues that matter most to you. Imagine a world of unlimited natural beauty and diversity, where humans live in harmony with the Earth's biological and natural systems. *What would that world look like?*

Think about a plant or animal **species** (see Chapter 4), or an **ecosystem** (see Chapter 5) that you want to **conserve**, **protect**, and **restore**, locally and globally.

Conserve – preserve the resilience and functions of ecosystems and biological communities by limiting the use and extraction of natural resources.

Protect – protect an ecosystem or species by campaigning to have it protected by government laws and international policies.

Restore – recreate an historic ecosystem or habitat. Improve the ecological resilience of a terrestrial or aquatic habitat. Reintroduce and encourage native species that have disappeared from an ecosystem.

Get Inspired

GET INSPIRED by learning about local and international biodiversity champions. Begin by reading the case studies of youth-led biodiversity projects in this chapter. You can also start to identify local biodiversity heroes in your family, neighbourhood, school or city.

Join TakingITGlobal's network of youth engaged in global issues and connect with youth leaders, organisations and projects from all over the world at www.takingitglobal.org.

A YOUNG STUDENT AT A LOCAL SCHOOL IN HAITI PLANTING A FRUIT TREE.
© FAO/Thony Belizaire



ASK YOURSELF

Are there threatened plant species that you want to protect?
Are there threatened animal species that you want to protect?
Are there natural ecosystems near your home or abroad that you want to protect?
Are there threats to biodiversity that concern you (see Chapter 2)?
Are there people you know or communities abroad who are affected by threats to biodiversity?



CASE STUDY: MT. KENYA YOUTH INITIATIVE FOR ECOSYSTEM RESTORATION

Sylvia Wambui Wachira, Kenya

The Mt. Kenya Youth Initiative for Ecosystem Restoration (MKYIER) is a volunteer-run community organisation, founded by urban and rural youth, to address deforestation in the Nyeri North district of Kenya.

Sylvia Wambui Wachira, MKYIER co-founder and programme manager, describes how she and her friends started the organisation and how they empowered a new generation of forest stewards, one school at a time:

“Schools in Kenya use firewood for cooking. Forests in Kenya are protected and it is illegal to cut trees on school properties. The schools buy wood from middlemen who source trees illegally from the forest reserve. In some school firewood piles, one can easily

spot pieces of endangered indigenous trees.

So, with this basic information, my friends and I decided to fundraise from our own pockets and raised funds from our friends and relatives to start tree nurseries in schools. We gathered information from our grandparents on seeds that are good for farming and also consulted the forestry department.

We started tree nurseries in 30 schools – 19 primary schools and 11 secondary schools. We worked with existing institutions such as the Red Cross and the Scouts. And at schools where there were no groups, we created Farmers for the Future groups.

We encouraged the students to plant the tree seedlings from the nurseries around their schools. The remaining



SYLVIA WAMBUI WACHIRA (LEFT) PLANTS A TREE SEEDLING WITH A STUDENT AT KABIRU-INI SECONDARY SCHOOL, KARATINA, KENYA.
© Sylvia Wambui Wachira

seedlings were given to the kids to plant at their homes.

We also established indigenous vegetable gardens in the school farms, which we introduced to the school groups as an activity.

We started the Mt. Kenya Youth Initiative for Ecosystem Restoration in 2006 and, now, the 10 000 trees we planted are already seven to ten metres tall.”

In addition to leading MKYIER, Sylvia works as the continental coordinator of the African Youth Initiative on Climate Change (AYICC). She is also a post-graduate intern with FAO Somalia.



CASE STUDY: ELLUMINATE FIRE & ICE ORGANIC GARDEN PROJECT

Annika Su, Taiwan

In 2006, Abel Machado School in the tiny community of Massambará, Vassouras, Brazil, participated in an online event that challenged schools to implement one activity to combat climate change in their local area. The event was organised by the non-profit global collaboration initiative, Fire & Ice, started by Elluminate, an e-learning and virtual conferencing technology provider based in Canada. In consultation with local farmers, the students at Abel Machado School created organic compost and fertilisers, and grew a wide variety of vegetables on a tiny plot of land on school property.



ANNIKA SU (LEFT) AND HER CLASSMATES, RUO-CHI KONG, HUEI-CHU WU AND YU-YIN TSAI, AT FONGSI JUNIOR HIGH SCHOOL, TAIWAN, ACCEPT A 2009 GLOBAL JUNIOR CHALLENGE AWARD ON BEHALF OF THE ELLUMINATE FIRE & ICE ORGANIC GARDEN PROJECT.

© Cindea Hung

In 2008, Elluminate Fire & Ice invited a team from Fongsi Junior High School, Taiwan, to join this project. Annika Su was one of the students at Fongsi Junior High selected to be part of this international collaboration, along with three of her classmates. Annika and her team in Taiwan started their own organic garden at Fongsi and shared information and strategies with other schools involved in organic gardening in Mali, France, Turkey, Cuba, Solomon, Japan and Indonesia. Through blogs, virtual conferencing, PowerPoint presentations and a TakingITGlobal virtual classroom, the Elluminate Fire & Ice Organic Project engaged participating schools in a cross-cultural, educational collaboration that would gain international acclaim. In 2009, the Elluminate Fire & Ice

Organic Garden Project was a finalist of the Global Junior Challenge in Rome, Italy. In Rome, Annika proudly accepted the award on behalf of her new global network of garden collaborators and friends.

When Annika first joined the Elluminate Fire & Ice Organic Garden Project in 2008, she was a “city girl” with no experience in gardening. After a full season of working to transform an empty plot at her school into a productive organic food garden, Annika developed a new appreciation for the Earth’s natural processes. When asked why it is important to preserve organic agriculture methods in the face of climate change, Annika responded, “if we don’t fight with nature, nature won’t fight with us. That’s why we should go back to working with nature.”

2. IDENTIFY AND GET INFORMED

Identify the issues

Refer back to your reflections on the biological resources that you would like to conserve, protect or restore. Now you can **IDENTIFY** and narrow down the biodiversity issues that are most important to you.

Which biodiversity issues are you most passionate about? What plant or animal species do you most want to protect? Is there a plant or animal species that is most important in your community?

Develop a set of questions that you want to answer. Here are some you might want to use:

- What makes this issue unique and important?
- Who is most affected by the issue, and why?
- How does this issue differ locally, nationally, regionally and globally?
- What different approaches have been taken to understand and to tackle the issue?
- Which groups are currently working on addressing the issue?
Consider different sectors such as government, corporations, non-profit organisations, youth groups, United Nations agencies, etc.

Get Informed

GET INFORMED by finding resources related to issues you want to learn more about. A good place to start is with resources related to international campaigns, such as the United Nations Decade on Biodiversity (see box: “The United Nations Decade on Biodiversity”). You can go to TakingITGlobal’s Issues pages to find organisations, online resources and publications for inspiration

www.tigweb.org/understand/issues.

Make a list of all the key resources you have found (organisations, publications, web sites):

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

ASK YOURSELF
What more can I learn about the issues that concern me?

THE UNITED NATIONS DECADE ON BIODIVERSITY

David Ainsworth, CBD

You are part of nature's rich diversity and have the power to protect or destroy it.

Biodiversity, the variety of life on Earth, supports the living systems that provide us all with health, wealth, food, fuel and the vital services our lives depend on. We know that our actions are causing biodiversity to be lost at a greatly accelerated rate. These losses are irreversible, make our lives poorer and damage the life support systems we rely on every day. But we can prevent them.

At its 65th session, the United Nations General Assembly declared the period 2011-2020 "*the United Nations Decade on Biodiversity*".

The decade builds on the success of the 2010 International Year of Biodiversity. The decade is a chance to think about the ways that our daily activities affect biodiversity. It's a chance to share your stories about conserving life on Earth and to inspire others to act. It's a chance to speak up and let your concern for biodiversity be heard in your town, your country and by the world leaders.

Here are a few things that you can do:

LEARN

- :: About biodiversity in your city, region and country.
- :: How your everyday actions have an impact on biodiversity, sometimes in distant ecosystems.

SPEAK

- :: Make your views known to government and business.
- :: Share your knowledge with people around you, and with the world. Post your ideas, pictures, artwork, videos and other creations on www.facebook.com/UNBiodiversity or twitter.com/#!/UNBiodiversity.

ACT

- :: Make responsible consumer choices.
- :: Support activities and organisations that conserve biodiversity.
- :: Join a local environmental group or organise your own activities that will help biodiversity.
- :: Be creative and find solutions to biodiversity loss.
- :: Continue your actions throughout the United Nations Decade on Biodiversity.



For more information, visit:
www.cbd.int/2011-2020



3. LEAD AND GET OTHERS INVOLVED

Lead your project to success

Identifying your skills and characteristics will help you **LEAD** your project to success. Start by understanding your own strengths and needs, and then consider how creating a team could help you to better achieve your goals. Helping your team members identify and leverage their own strengths and talents for the project is an important part of leadership. It is also important to ensure that all those involved are able to share in the vision of what you are trying to achieve.

Think of someone who shows strong leadership. What makes that person a good leader? Create a list of leadership qualities. Some examples are:

- **Accountable**
- **Compassionate**
- **Dedicated**
- **Fair**
- **Honest**
- **Innovative**
- **Motivational**
- **Open-minded**
- **Responsive**
- **Visionary**

Develop a team and get others involved

Once you have reflected on your personal leadership assets and goals, you are ready to develop a team and **GET OTHERS INVOLVED**. The box "Community Action to Improve the Environment" describes how, through the World Association of Girl Guides and Girls Scouts (WAGGGS), many girls and women have formed strong teams and have involved others. You can develop a team by starting with people you know and then expand the project to the wider community. Discuss the environmental issues in your community. How can you encourage members of the community to take part in your project to address these issues?

List the leadership skills that you possess:

- 1.
- 2.
- 3.
- 4.
- 5.

List the leadership skills that you want to develop:

- 1.
- 2.
- 3.
- 4.
- 5.

Name some people you already know who would want to be part of your team:

- 1.
- 2.
- 3.
- 4.
- 5.

What are some of the skills that your team members can contribute with?

- 1.
- 2.
- 3.
- 4.
- 5.

COMMUNITY ACTION TO IMPROVE THE ENVIRONMENT

Kate Buchanan, WAGGGS

Member Organisations of the World Association of Girl Guides and Girl Scouts (WAGGGS) carry out many projects around the world.

Here are two examples of projects tackling environmental issues.

Both projects won an Olave Award for outstanding community service work at the WAGGGS World Conference in 2008.

Girl Guides of Malaysia: “Recycling for Unity” project

The project aim was to create awareness in the community on the importance of preserving the natural environment. This included instilling a sense of social responsibility to protect the environment, to reduce pollution, and to work towards creating a pollution-free environment at the local level.

The Girl Guides conducted a survey to assess the community’s knowledge and experience in waste management and recycling. Based on the survey results, the Girl Guides visited several households and distributed information

about the issues. The Girl Guides collaborated with local government, businesses and community groups to implement the project, which included distribution of recycling equipment. The project was monitored through home visits by the Girl Guides.

This was the first such project carried out in Malaysia and required significant collaboration between the private and public sectors. One unexpected benefit is that the community now has a residents’ association that developed as a result of the collaboration of various groups involved in the project.



Girl Scouts of the Philippines: regional impact project on the environment

Girl Scouts from Mindanao, an island in southern Philippines, initiated a service project on solid waste management, recycling, food production, supplementary feeding and vermiculture (the process of breeding worms to compost waste). Forty Girl Scouts transformed waste land that had become a dumpsite into an organic vegetable, ornamental and herbal community garden. The girls took part in all aspects of the project. They worked closely with local government officials, local leaders and health workers, the Department of Education

and the Department of Agriculture and Girl Scout volunteers and staff.

The local community built a shed with funding from the Mayor's office. The shed served as a meeting place for the girls as well as a display area for various craft products made from recycled materials.

The health workers supervised the growing and harvesting of organic vegetables and herbs. Inspired by the girls' community action, more families in the community have constructed their own backyard compost pits and are now growing their own organic vegetables. The Girl Scouts were happy to

share their time and skills. In carrying out the project, the girls broadened their attitude to community service and deepened their understanding of environmental issues.





4. GET CONNECTED

You can also develop a team by networking and **GETTING CONNECTED** to people you have not yet met, but would like to work with. They can be associated with people who you already know, or you can try to connect with a network already working on the issues that matter to you.

You can start by attending events and conferences on biodiversity (see box: “Biodiversity Matters International Youth Symposium for Biodiversity”).

List at least one event that you would like to attend:

BIODIVERSITY MATTERS *INTERNATIONAL YOUTH SYMPOSIUM FOR BIODIVERSITY*

Michael Leveille and Daniel Bisaccio

“The sharing of information and collaboration with students from other nations bring us closer together and help us all to realise that we do indeed live in a global village.”

Clint Monaghan,
delegate director
Second International
Youth Symposium for Biodiversity

Young people today are needed and can be meaningfully involved in protecting one small ecosystem at a time for their future and for the future of all generations.

Youth conferences are one way in which young people amplify the impact of their ideas and work.

At biodiversity symposia such as HabitatNet (Mexico, 2005) and Biodiversity Matters (Canada, 2009), youth from around the world gather to share information and strategies on youth - led projects that are making a difference.





Here are a few examples of actions that young people, like you, are undertaking:

- :: High school students in Japan are protecting, breeding, and researching local owls.
- :: In Ottawa, Canada, a team of elementary and middle school students are protecting an inner city marsh, and have recorded over 1 340 species.

:: A group of students from Southern India are studying and restoring a young forest sanctuary named Aranya.

:: Secondary students from Mexico and the United States are working together to protect habitats required by migratory bird species that spend part of their lives in both countries.

These types of projects are becoming a reality because youth are taking initiative and leading the way.

You can make a difference too!

Start by attending the next International Youth Symposium for Biodiversity. Join a local environmental group. Or plant a tree at your school as part of *The Green Wave* (greenwave.cbd.int).

For more information, visit: biodiversitymatters.org



5. PLAN AND GET MOVING

Develop an Action Plan

By now you have identified biodiversity issues of concern, you've learned more about the issues, and have recognised your skills and those of your team. You have also learned about the importance of networking and connecting with people who can help you to achieve your goals. You are ready to develop and implement an action **PLAN**.

Keeping in mind the issue you identified, what goal, or desirable outcome, will you work towards in your action plan? Here are some possible examples:

Conserve

- Campaign to prevent the destruction of a natural area.
- Raise awareness of a product or service that threatens biodiversity.

Protect

- Campaign to have an ecosystem recognised as a United Nations Educational Scientific and Cultural Organization (UNESCO) Biosphere Reserve.
- Get an at-risk plant or animal species on the International Union for Conservation of Nature (IUCN) Red List of Threatened Species.

Restore

- Plant native aquatic and wetland species to restore a degraded shoreline, stream bank or wetland.
- Start a tree nursery to replant an old growth forest.



© FAO/Ricardo Gangale

WRITE YOUR GOALS

Brainstorm five possible actions related to the issue you have identified. Actions are activities that will help you to achieve your goals:

- 1.
- 2.
- 3.
- 4.
- 5.

Develop a Mission Statement

Project Mission

Clarify what you want your project to achieve and write it down in the form of a mission statement, a short clear sentence of your purpose. For example: *Restore endangered bird habitats in local wetlands.*

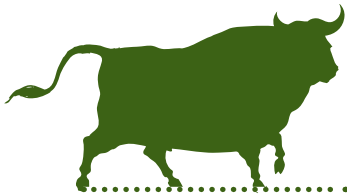
Project Activities

What actions can you take to work towards achieving the mission of your project? Example: *Plant native wetland and aquatic plant species.*

Break it down

You know your mission. Now, use the sample chart below to break your project down into specific activities, resources, responsibilities and deadlines. Planning these activities in detail will ensure your project is a success. If your goal is to *restore endangered bird habitats in local wetlands*, your chart might look similar to this example:

ACTIVITY	RESOURCES	RESPONSIBILITIES	DEADLINE
Plant native wetland and aquatic species	:: Local conservation authorities :: Native plant nursery :: Grandma with her green thumb and native seed collection	<i>I will:</i> consult local conservation authorities to find out about which native species to plant <i>Joe will:</i> drive me to the native plant nursery <i>Grandma will:</i> show me how to collect seeds from native plants in her backyard	22 April, Earth Day



Implement

Once you have finalised your plan, it is time to **GET MOVING** to implement your project. Take time to chart your progress so that you can appreciate and assess the impact of your actions. Document your project with pictures and videos. It is also a good idea to keep a project journal or blog.

Try to refer to your plan along the way, but don't expect everything to go according to the plan because many circumstances are unpredictable.

You may need to revise your plan as you encounter challenges. So, remember to enjoy the entire experience as a learning process.

Raise Awareness

Create promotional materials, such as press releases and flyers, to get publicity and to let people know about your project! Word of mouth is one of the strongest marketing tools. Be enthusiastic and stay positive when you let others know how and why they should get involved. One way

to promote your project is to create a project page on TakingITGlobal (takingitglobal.org) or add it to *The Green Wave* (greenwave.cbd.int) website.

Stay Motivated

Be sure to stay motivated, especially in the face of obstacles. Every challenge is an opportunity to learn. Problem-solving will require you to use your creativity to come up with innovative solutions to each challenge.



CHILDREN FROM ST. GEORGE'S SCHOOL WITH THEIR BIODIVERSITY CHALLENGE BADGE CERTIFICATES.
© FAO/Alessia Pierdomenico

6. HAVE A LASTING IMPACT

Monitoring your project throughout each stage will help you to best respond to changes that occur along the way and **have a lasting impact**. It is helpful to set out indicators or measures of success to make sure you stay on track. The more specific your indicator, the easier it will be to evaluate your achievements.

FAO AND WAGGGS TREE PLANTING CEREMONY AT FAO HQ IN ITALY.
© FAO/Alessandra Benedetti



For example:

OBJECTIVE

Establish native plant nurseries on school grounds properties

INDICATORS OF SUCCESS

- :: Number of schools engaged in project
- :: Number of native seedlings planted
- :: Diversity of species planted
- :: Educational materials created and distributed





CONCLUSION

Now that you have read through the **Six Simple Steps Towards Change**, you are ready to lead your own biodiversity action project to success. Remember that these steps are only guidelines and you may want to set your own path. There is no perfect system or path to success because each situation is unique. Every action project you start is a learning journey that will challenge you to problem-solve and to develop your own skills and talents. Don't forget to take the time to document and reflect on your progress. Keeping good records will help you to learn from your experience and it will also help you to share what you learned with other people at home and abroad. As a young biodiversity champion, you can help other youth to reflect and get inspired to start their own action projects.



Use the
Biodiversity challenge badge
to inspire you to take action:
www.fao.org/climatechange/youth/68784

LEARN MORE

- :: African Youth Initiative on Climate Change: www.ayicc.net
- :: Biodiversity Matters: www.biodiversitymatters.org
- :: Elluminate Inc.: www.elluminate.com
- :: Elluminate Fire & Ice: www.elluminate.com/fire_ice/media.jsp
- :: Farmers for the Future: farmersforthefuture.ning.com
- :: *The Green Wave*: greenwave.cbd.int
- :: *Guide to Action: Simple Steps Towards Change*, TakingITGlobal (2006):
www.tigweb.org/action/guide/online.html
- :: HabitatNet: www1.sprise.com/shs/habitatnet/default.htm
- :: International Year of Biodiversity: www.cbd.int/2010
- :: Mt. Kenya Youth Initiative for Ecosystem Restoration: www.mkyier.org
- :: TakingITGlobal: www.takingitglobal.org
- :: TakingITGlobal for Educators (TIGed): www.tigweb.org/tiged
- :: WAGGGS: wagggs.org