



# TREE GROWING FOR CONSERVATION AND ECOSYSTEM RESTORATION: A GUIDE FOR FAITH-BASED ACTORS



UNITED NATIONS DECADE ON  
**ECOSYSTEM  
RESTORATION**  
2021-2030



# FOREWORD



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In 2022, the [Faith for Earth Dialogue](#) was held as a contribution to the policy discussions around the theme of the fifth session of the United Nations Environment Assembly (UNEA 5.2). It introduced, for the first time, faith voices at the plenary discussions of UNEA supported by an interfaith statement representing the 860 participants of the dialogue.

The [interfaith statement](#), at this highest level decision-making body on the environment, affirmed the motivation and values of faith actors to live and practise their beliefs in harmony with nature, build resilience of faith communities, and provide spiritual, practical, and psychological support to displaced people, vulnerable communities, and to millions affected by natural disasters and environmental crises.

**Already, faith communities and civil society actors are planting hundreds of millions of trees worldwide, as described and celebrated by these guidelines.** While faith institutions own a whopping 8% of habitable land on earth and 8 in 10 people ascribe to a religious or spiritual tradition, there is a dire need for capacity building and provision of scientific approaches to aid in effective and impactful tree growing efforts by faith actors, as described in UNEP’s Faith for Earth strategy for the implementation of the [UN Decade on Ecosystem Restoration](#).

Major religious traditions around the world call for living in harmony with nature as basic principles engraved in their teachings. Building on these spiritual connections is essential in facing the triple planetary crises of climate, biodiversity, and pollution in rural and urban areas.

With this in mind, the guidelines presented in this publication, view tree growing as one element on the canvas of the restorative actions that can be played by faith actors, and others, at the global, regional and local levels.

WWF and UNEP Faith for Earth are aligned with the need to integrate [the science of ecosystem restoration](#) – pushing the needle from tree planting to tree growing – and integrating geospatial mapping at scale to demonstrate the same.

In support of this, IUCN’s [Community Organising Toolkit](#) for the UN Decade on Ecosystem Restoration calls for grassroots action to prevent, halt and reverse the degradation of ecosystems across the globe, addressing financial, physical and ecological well- being.

*“In order to move forward and overcome some of the biggest challenges our world is facing today, such as overexploitation, biodiversity loss and climate change, it is important to rebuild the connections between people and ecosystems.”* P. 12, Community Organising Toolkit, IUCN.

These guidelines align with the [Principles of Ecosystem Restoration](#) from the UN Decade and the [Community Organising Toolkit](#) offering a plethora of ideas gathered through an extensive consultative process to support the development of concrete, feasible and implementable tree growing initiatives. They underscore the need for communities to collect data, monitor and evaluate progress on restored areas.

We welcome faith and civil society actors interested in tree growing to take up this simple and interactive set of guidelines and share their experiences with us at UNEP Faith for Earth.



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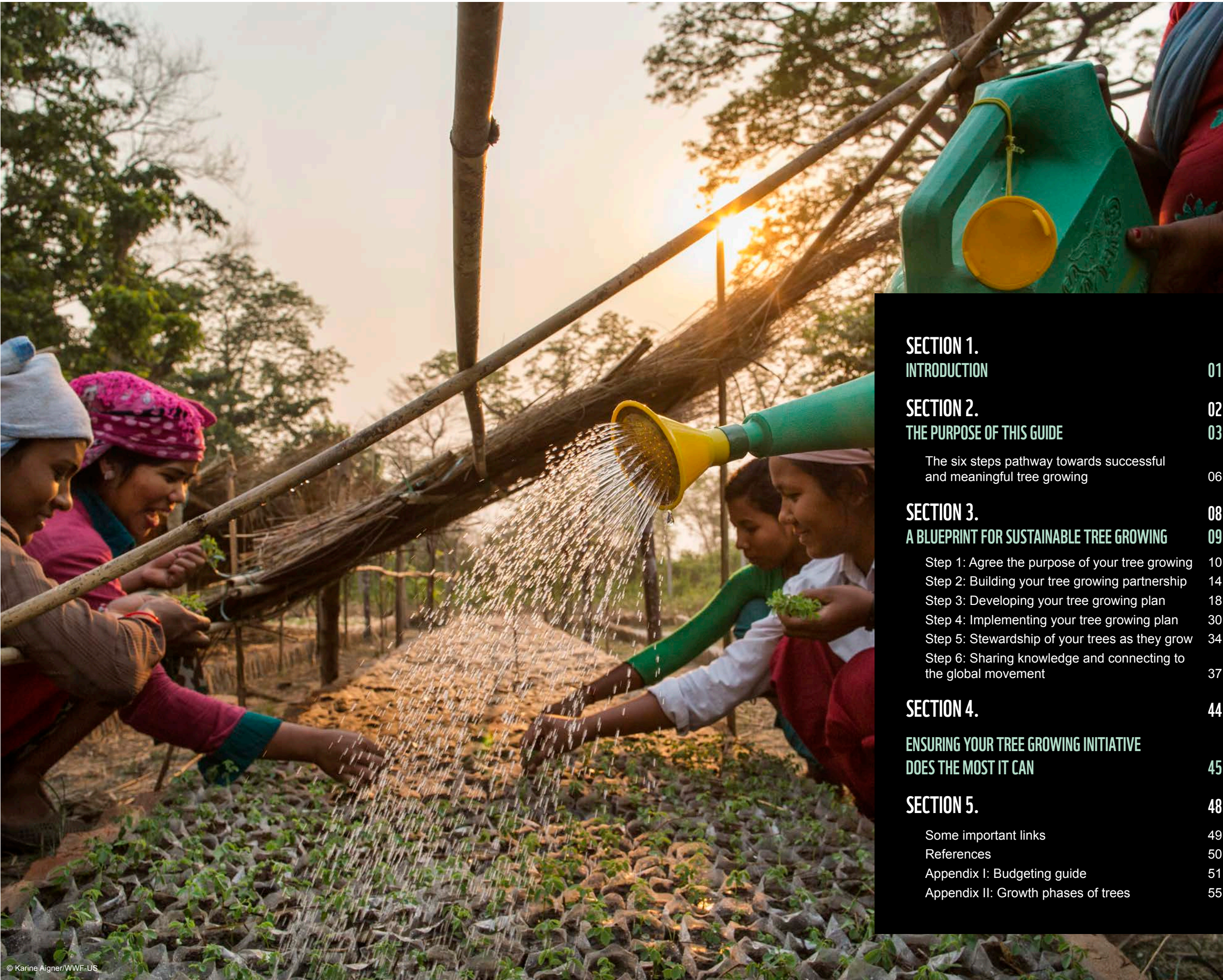
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**About WWF**  
WWF is an independent conservation organization, with over 35 million followers and a global network active through local leadership in over 100 countries. Our mission is to stop the degradation of the planet’s natural environment and to build a future in which people live in harmony with nature, by conserving the world’s biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption. Find out more at [panda.org](https://panda.org).

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**About Trillion Trees**  
Trillion Trees is a joint venture between BirdLife International, Wildlife Conservation Society (WCS) and WWF to urgently speed up and scale up the positive power of forests. Our work helps protect and restore forests all over the world for the benefit of people, nature and climate. To learn more about how we’re improving forest protection, advancing restoration and ending deforestation visit [trilliontrees.org](https://trilliontrees.org).



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# SECTION 1

## INTRODUCTION

These guidelines offer a simple step-by-step approach to assist faith actors in developing and implementing tree growing initiatives. They have been designed to support faith actors around the world who are mobilising their communities and their significant resources, infrastructure and lands to plant and grow thousands of trees. This movement stems from religious beliefs and values that speak to caring for the Earth, recognising the intrinsic value of nature and our need for a balanced relationship with the ecosystems that sustain us.



**TREE GROWING  
INITIATIVES CAN  
ULTIMATELY  
SUPPORT  
PEOPLE, NATURE  
AND CLIMATE**



**SMALL-SCALE  
TREE GROWING  
EFFORTS CAN  
CONNECT TO  
LARGER TREE  
GROWING  
EFFORTS AT  
A LANDSCAPE  
SCALE**

Faith groups plant trees for many reasons: to commemorate auspicious days, as a way to bring their community together and connect with others, to create a sacred forest, to strengthen food security, to green and beautify city spaces, and to help reduce biodiversity loss and mitigate climate change.

We share how to bring into the design and delivery of your tree growing initiatives, the multiple benefits trees can provide to support people, nature and climate.

These guidelines provide a comprehensive evidence-based framework to support and enable

your faith group to develop concrete, feasible and implementable tree growing initiatives. Co-created after a series of workshops with faith organisations growing trees to take positive action and building partnerships to work together to achieve a shared vision.

They present an approach that shows in partnership, even small-scale tree growing initiatives can feed into larger landscape ecosystem restoration and achieve transformational change at a scale that can be of most benefit to people, nature and climate in the future.



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## SECTION 2

# THE PURPOSE OF THIS GUIDE

As human-induced climate change pushes our natural and human systems beyond their ability to respond and adapt, it is often the most vulnerable people and systems that are disproportionately and negatively affected by the impacts of the climate crisis we are facing. To keep our climate changing at a pace that we can adapt to for survival, the IPCC scientists made it clear we need to keep the world on or below a 1.5°C global rise in temperature by 2030. This planetary target was agreed by the world's governments at the [UN Climate Change Conference in Paris, 2015](#).

It is widely recognised as a global community that the most immediate thing we need to do is drastically reduce our global emissions by decarbonizing our energy systems and by making changes to our day to day lives ([United Nations Environment Programme 2021](#)). But cutting emissions is simply not enough. Many countries will not be able to meet their carbon emissions reduction targets, or support how we adapt to our changing climate without also restoring critical ecosystems that have been damaged or lost. More importantly, if we are to have a liveable future we need to start repairing and rebuilding our natural systems now. By looking at how we live in harmony with nature and by

addressing the loss of important habitats such as forests and restoring degraded ecosystems, we will be able to increase our resilience and ability to thrive as the world's climate changes.

In 2021, forests covered at least 31% of our planet. We rely on them to provide global benefits such as carbon sequestration, water and nutrient cycling, but also locally important benefits such as food, energy, medicine and much more to over a billion people. Yet despite this we are losing forest at a rapid rate - with approximately 10 million ha ([State of the World's Forests](#)) or 18.6 million soccer football fields lost each year and even more subject to degradation.

Figure 1. Benefits that Tree Growing for Landscape and Ecosystem Restoration can provide

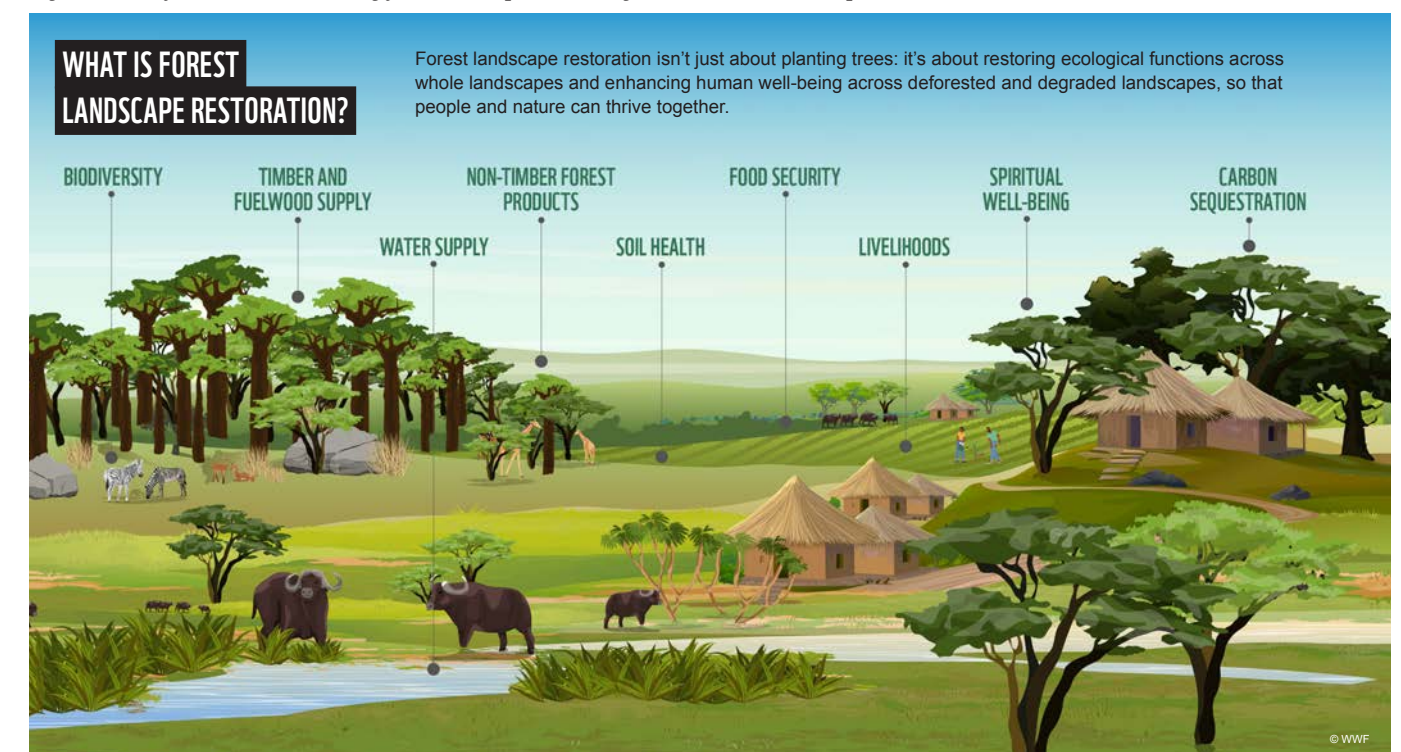
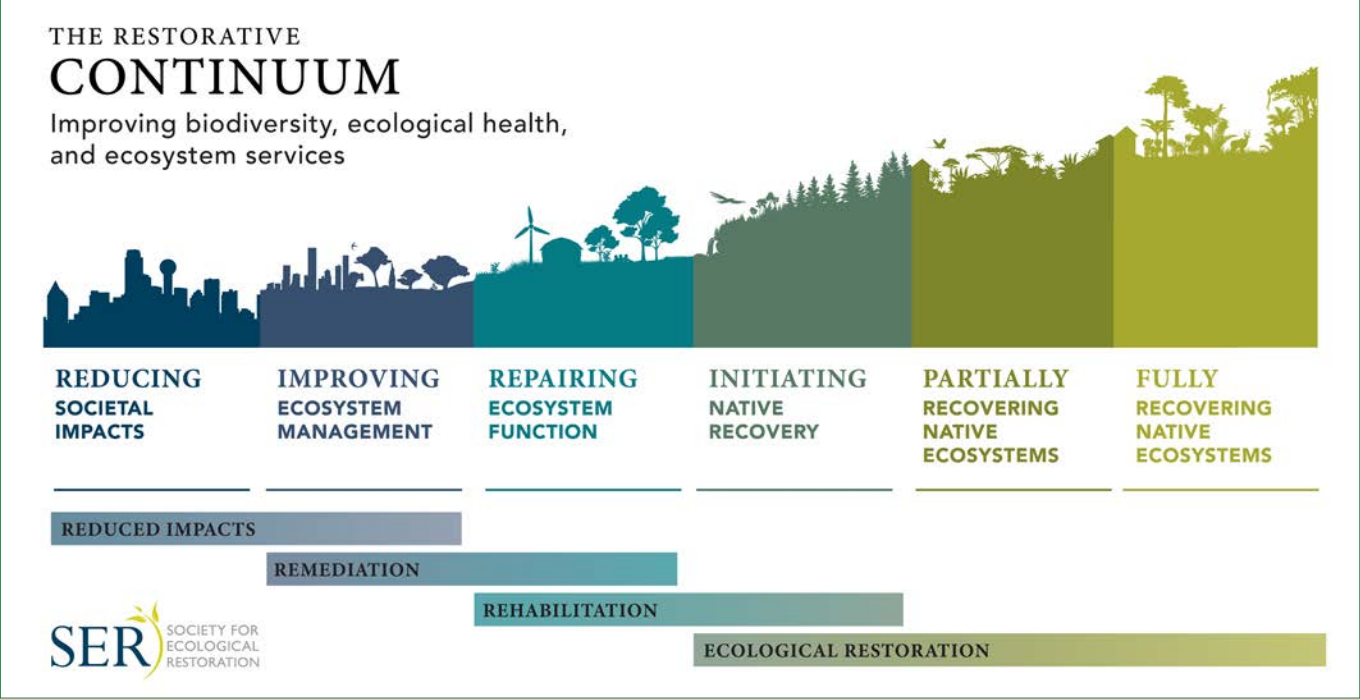




Figure 2. The Restorative Continuum Gann et al (2019)



For all these reasons forest restoration plays a critical role in how we rebuild the Earth’s natural balance. Typically forest restoration can be initiated through three key processes, often occurring together within a single landscape;



**1. Active restoration** is done where land is very degraded and/or obstacles prevent the forest from recovering on its own. This often involves planting areas of native trees and shrubs, combined with agroforestry approaches.



**2. Assisted natural regeneration** is encouraging former forest to reassert itself, for example by removing invasive vegetation or putting in physical barriers such as fencing the land to reduce grazing pressure and allow the forest to regrow.



**3. Spontaneous natural regeneration** is often considered the best-case lowest cost scenario for reforestation: a hands-off approach, where an area of land can reforest itself of its own accord. Natural regeneration can take place without human input, and even without human knowledge.

Combined, these restoration processes contribute to the restorative continuum that happens from reducing societal impacts across to supporting ecosystems such as native forests to recover fully.

While they are a long-term commitment, tree growing initiatives have the potential if planned and implemented well, to support a range of economic, social and spiritual aspirations of communities within a landscape. Tree growing in its many forms can help to restore forests to a landscape and reverse biodiversity loss and could include restoring habitats for threatened wildlife or improving water availability.

As they grow, trees can also help combat the negative impacts of climate change on people and nature by providing multiple benefits, including essential resources such as food and medicine. They can offer sustainable livelihood possibilities through agroforestry plots and timber woodlots or non-timber forest products such as natural rubber or rattan. Ultimately, by investing the right level of time and resources they can generate long term and sustainable benefits.

The following framework has been developed from recognised best practices to support faith-based groups in their efforts to design, plan, implement and steward their tree growing efforts. While it covers the active process of forest restoration (1. active restoration and 2. assisted natural regeneration), you may also be able to facilitate spontaneous natural regeneration in your target areas for restoration.

Faith-based organisations and actors are uniquely placed to undertake meaningful and sustainable tree growing initiatives across a variety of landscapes, carrying with them huge potential to utilise existing infrastructure, networks, human capacity and dedication necessary to successfully contribute to forest restoration.





# THE SIX STEPS PATHWAY TOWARDS SUCCESSFUL AND MEANINGFUL TREE GROWING

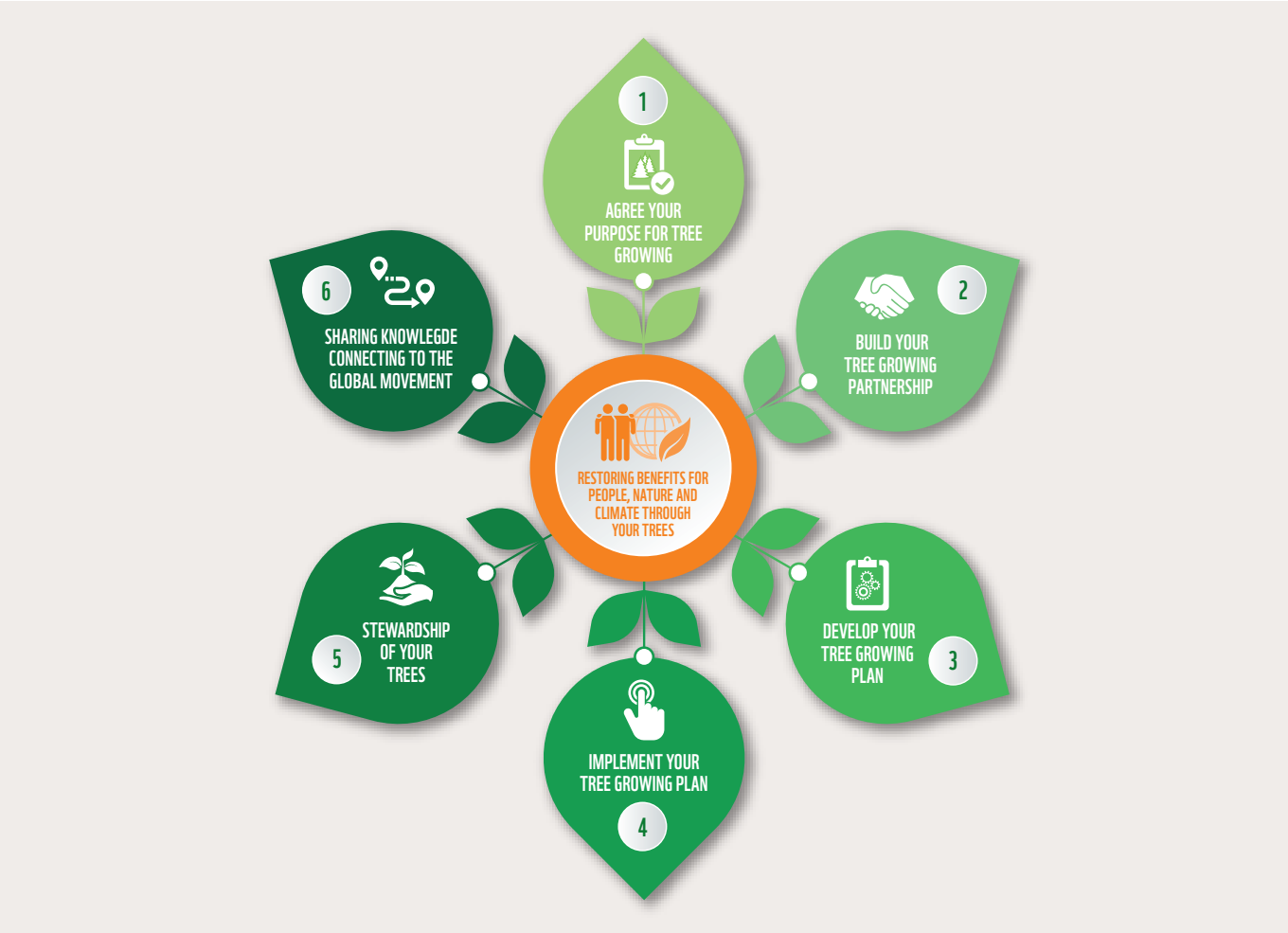


Figure 3. Steps towards successful tree growing that restores benefits for people, nature and climate.

The six steps we have developed are an evidence-based and proven approach to supporting you to achieve successful and meaningful tree growing. These steps are not prescriptive, neither do they capture all the opportunities or challenges you may face during your tree growing journey, as we recognise each landscape and its communities are different and often complex, so each will require a tailored approach.

These steps therefore outline a practical framework for you to use and adapt for your own context. Initiatives often focus on tree planting, but this should not be the only step to restoring trees to an area but be part of the process of successfully growing your trees.

To be successful you need to first consider what type of restoration you may want to support, whether assisted or natural. If you do decide to grow trees you need to choose your approach to planting the right trees, in the right place at the right time, but also give time to planning what needs to happen before and after your planting and joining a broader community of practice. So, by focusing

on ‘tree growing’ rather than ‘tree planting’, you can ensure your trees thrive and last well into the future, providing long- term benefits for your community.

## BEFORE YOU BEGIN ON YOUR JOURNEY

It is important to take time to consider the context in which you are going to be planting and caring for your trees. As with any restoration efforts, tree growing is not without risk. The step-by-step process will help you to identify typical risks (e.g. operational, ecological, financial, reputational) your initiative may face and signpost how you as a partnership might respond and manage them.

As you embark on your initiative, to be successful and sustainable you need to consider not just the biophysical (soil, water, native tree species etc) aspects of the potential areas your trees may be growing, but also the wider social, economic and cultural context you will be operating in. This preparatory step is critical in understanding how your tree growing initiative can be an inclusive and mutually beneficial effort for your community, wider society and nature.

## CHALLENGES



It is essential to identify and reflect on what caused the loss of trees and forest in the area you are looking to grow your trees, for example was it pollution, over-exploitation or development or more? It is very likely to be a combination of several of these factors. You need to determine through research if these threats or issues are still present and to what level? If they are, some of these may be out of your control but others you may be able to influence and manage directly. You will need to integrate your response to these threats into your tree growing plan so you can protect your site and prevent further harm to the trees you grow to ensure they will survive into the future.

## OPPORTUNITIES



Identify who might also be undertaking forest restoration near you - could you visit their tree growing site and learn from their approach? Are there other groups near you or within your faith group seeking to grow trees that you could reach out to and discuss your ideas with? Sharing your tree growing journey through collaborating and learning will grow your connection to nature and can be an important part of your tree growing journey.

## CONNECTING



To minimise any negative socio-cultural impacts of your tree growing initiative, it is critical to recognise indigenous and local groups from the beginning. Often these groups have the greatest knowledge and understanding of the target area, and this knowledge will be key to the successful planning and implementation of your project. Consider the roles and activities of local and indigenous groups and plan how to appropriately engage them in discussing your ideas. This will likely include using inclusive approaches such as [Free Prior Informed Consent](#) (FPIC), so you can discuss together the potential opportunities they may see your tree growing initiative could have.

Consider how the wealth of relevant indigenous and local knowledge can be incorporated in the planning, delivery and stewardship of your restoration activities. As you work together, map out the opportunities to participate in restoration activities that you have jointly identified and how successful traditional practices and forest stewardship can be built on to ensure multiple benefits to the community.



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# SECTION 3

## A BLUEPRINT FOR SUSTAINABLE TREE GROWING









STEP 1: AGREE THE PURPOSE OF YOUR TREE GROWING



PROVIDING SPACE FOR REFLECTION AND PRAYER, GROWING SPIRITUALLY SIGNIFICANT SPECIES, TREE SPECIES THAT CAN DELIVER FOOD SECURITY FOR PEOPLE AND/OR WILDLIFE, RARE OR THREATENED NATIVE SPECIES, CONNECTING GREEN SPACES IN URBAN OR RURAL AREAS, GROWING TREES FOR FUTURE GENERATIONS.

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STEP 1: AGREEING YOUR PURPOSE FOR TREE GROWING	
CHECK	YOU HAVE DISCUSSED AND AGREED THE LONG-TERM VISION OF YOUR TREE GROWING INITIATIVE
WHY 	<p>Your vision is a short statement outlining the long-term aspiration your partnership would like to achieve from your tree growing efforts. This is the inspirational focus to guide you through your efforts.</p> <p>The reasons for tree growing and the creation of a woodland or forest grove can be a combination of spiritual, social, ecological and financial motivations. It is important these reasons are identified and agreed upon by all the stakeholders that may be involved in your partnership.</p> <p>By negotiating and agreeing your vision and purpose you are providing a clear framework for your tree growing efforts and for everyone involved to be engaged and have ownership of the process. This will be crucial to engaging your partners in the long-term commitment of managing the trees, particularly in the early stages of their growth.</p>
HOW 	<p>It is important to create an open, inclusive and comfortable environment for your group to discuss their motivation for tree growing and what is the desired state of the area once your trees have grown and are producing the benefits you wish to see. Defining your vision as a group will enable you to set out your aspirations as a group.</p> <p>Everyone involved in your tree growing initiative needs to be fully aware that tree growing requires long-term commitment and investment. So a good vision should include the long-term goal and objectives/motivation /purpose of the tree growing effort, where it will be and who will benefit (stakeholders).</p> <p>You may need to build a greater understanding of who to involve in developing and agreeing your vision, so you may want to carry out Step 1 and Step 2 in parallel. As your partnership grows and your knowledge and experience as a partnership deepens, it is always beneficial to revisit your vision to see if it still holds true or may need refining.</p> <p><i>For example: Your purpose could be ‘A shared sacred grove for spiritual reflection, communing with nature and connecting with our community’</i></p>
QUESTIONS TO ASK 	<p>Why is tree growing important to us? What are our motivations for tree growing? What changes do we want to see in the long term from our tree growing efforts? Can we set our objectives that show this change? Are there other restoration actions we can implement alongside tree growing? What is the scope (where) and scale (size) of our initiative? Growing trees means land could be set aside for long periods of time. Can we capture the location, size and timeframe in our vision? Can we support existing partnerships? Can we restore our own land/faith-owned assets/community spaces? Or are we seeking to support others to grow trees?</p>
REMEMBER 	<p>Where several partners are working together, their motivations may vary, but building consensus around your vision is a crucial step for your tree growing plan to be successful. While an open dialogue is built, take this as an opportunity for learning from others' opinions and identify shared interests.</p>
SOURCES OF GUIDANCE 	<p>Consultation with key stakeholders such as members of your immediate and wider faith group, local community and indigenous groups representatives, and local government forestry department. Additional potential stakeholders who might need to be involved will be identified in Step 2.</p> <p>Online help for planning your vision e.g. <a href="#">UN Decade Community Organising Toolkit</a></p>



CHECK 	YOU HAVE DEFINED AND AGREED YOUR PURPOSE FOR YOUR TREE GROWING INITIATIVE
WHY 	<p>Your purpose should be a short high-level statement of intention and to map out what you will achieve during your journey to fulfil your vision.</p> <p>Outline the purpose of your tree growing, where it will be, who will benefit from the tree growing (e.g. involving local and indigenous community members, youth groups) and why. Your purpose can also provide more practical details on how you are going to achieve your vision.</p>
HOW 	<p>It is important to think about what benefits your tree growing could bring to your faith-based group and explore together what potential additional benefits to the wider community could be e.g. food security, biodiversity and climate resilience benefits.</p> <p>Discuss and sketch out the needs your tree growing could address e.g. providing a space for reflection and connecting to nature. At this early stage, engaging key stakeholders who you may want to be involved in your tree growing in these discussions, will help in identifying all the benefits your tree growing could potentially deliver.</p> <p>Your purpose should then capture the potential benefits your tree growing efforts could generate and how it can meet the multiple needs you have identified in your area and group. You should be clear on what good forest restoration looks like for your partnership.</p> <p>Regularly re-visit your vision and develop the purpose and objectives of your tree growing to show how you will achieve this vision.</p> <p><b>For example:</b> <i>Your Purpose could include ‘Tree growing in the land belonging to our faith group will provide a peaceful space for reflection, we will restore native tree species to promote the recovery of our endangered wild birds and provide shade to grow crops that will contribute to the long-term food security of our wider community’.</i></p>
QUESTIONS TO ASK 	<p>Why do we want to grow trees? What do we want from the green space or forested area we will create? Who will benefit from these trees, green or forested areas? What needs do our group and other important stakeholders have? How can this contribute to strengthening our community bonds? What needs can our tree growing efforts help meet? Are there potential negative impacts or costs to growing trees? If we have identified any, how do we prevent them from happening?</p> <p><b>For example:</b> <i>Your tree growing could provide shade and a place for reflection such as the sacred groves planted by EcoSikh, as well as potentially provide connectivity between existing forests, connecting your area to conservation efforts such as biodiversity recovery and reducing human-wildlife conflict.</i></p> <p>Promoting positive human-wildlife coexistence and increasing human-wellbeing are the focus of efforts in Piple-Pokhara, Nepal where 1,600 households take care of 235 hectares as part of their <a href="#">community forests</a>.</p> <p>In the Atlantic Forest in Brazil, communities are creating ‘<a href="#">Remembrance Forests</a>’, planting trees and creating a forest to honour the memory of loved ones, sadly lost in the Covid 19 Pandemic, combining faith and conservation.</p> <p>Tree growing could increase the food security of your community by planting certain species such as fruit trees like mangos, or coconuts, in addition certain tree products could be sold to provide additional income and/or support the maintenance of your trees in the future.</p>

REMEMBER 	As you talk about the benefits of tree growing you will likely also start thinking about the costs and risks as well. It is important to keep a record of these to support your planning.
SOURCES OF GUIDANCE 	<p>Consultation with other partners or stakeholders involved in the initiative helps refine your vision and capture collective objectives and benefits for tree growing.</p> <p>This can include other partners or stakeholders, speaking to the government agency in charge of environment or forestry, or local technical organisations experienced in tree growing.</p> <p>The <a href="#">Interfaith Rainforest Initiative Primer</a> and IUCNs <a href="#">Community Organising Toolkit</a> can provide additional guidance as you embark on your planning.</p> <p>To help inform your partnership about what are the key elements your tree growing efforts will could include, the UN principles for Restoration and the <a href="#">Global Partnership for Forest Landscape Restoration</a>, can help you think through this.</p>












STEP 2: BUILDING YOUR TREE GROWING PARTNERSHIP

CREATING OPPORTUNITIES FOR INTER-FAITH AND CROSS-GENERATIONAL COLLABORATION, LEARNING FROM EXPERIENCES WITHIN AND WITHOUT YOUR PARTNERSHIP, OUTREACH OPPORTUNITIES WITH COMMUNITY, CONNECTING TO TECHNICAL ADVISORS TO REALISE YOUR PURPOSE AND WHAT RESOURCES ARE NEEDED

STEP 2: BUILDING YOUR TREE GROWING PARTNERSHIP	
CHECK	YOU HAVE MAPPED AND IDENTIFIED WHO YOU MAY NEED IN YOUR TREE GROWING PARTNERSHIP
WHY	<p>Collaborating with relevant stakeholders is essential to informing the development of appropriate and sustainable tree growing initiatives and developing a partnership that can benefit all.</p> <p>Partnerships can create opportunities for inter-faith and cross-generational collaboration, for learning from others' experiences and for connecting to technical advisors - all of which can help you to realise your purpose and what resources are needed.</p>
HOW	<p>While your partnership will likely evolve and change over time it is important to establish a core team that is committed to delivering your long-term vision. Different partners are needed at various times in the delivery of your tree growing initiative but may not need to be involved from the start.</p> <p>Think about the expertise and specific roles different stakeholders can bring to your tree growing partnership. As you bring people together it will be the shared discussions that will facilitate identifying what needs your tree growing initiative has and who could be in your partnership.</p> <p>Using tools such as <a href="#">Free Prior Informed Consent</a> (FPIC) and agreeing decision making protocols outlining the rules of engagement are very effective where collective decision making is needed. Often these approaches will be aligned but independent of your faith and community decision making systems to ensure equity and inclusion.</p> <p>A partnership agreement or Charter is helpful in outlining clearly how you will work together and agreeing a clear structure and framework for how your partnership will work. Joint agreements such as these support effective and inclusive decision making and are important in the long-term stewardship of your trees. Multi-stakeholder platforms are also good for inclusive governance which is important for a successful long-term plan.</p> <p><i><b>For example:</b> Partnership opportunities can include Government schemes that enable you to connect to for resources or technical expertise. Private sector players can also have potential roles such as providing resources e.g. funding seedlings or equipment.</i></p>
QUESTIONS TO ASK	<p>Have we identified potential stakeholders who could add value to our tree growing partnership? Have we mapped out the roles and responsibilities of key roles to deliver our vision and thought about the skills we have in our partnership now - are there any gaps? If so, who might be able to help inform the right people to become involved?</p> <p><i><b>Working together</b></i> - Have we agreed on how we are going to work together on the partnership? Where will we meet as a group? How often will we meet? The start of a partnership will likely be very time intensive - is everyone involved, especially in the core team, able to provide that time or can it be shared with more people?</p> <p><i><b>For Example:</b></i> A Partnership Charter can be agreed which outlines your shared values and how you will work together. It provides a clear framework for current partners and for future partners to engage with.</p> <p><i><b>Being inclusive</b></i> - Are we considering how our tree growing efforts can support gender equality, social inclusion, encourage diversity and support equity? Can we increase opportunities to involve groups from across our community e.g. women, youth and/or those with disabilities to become actively involved in the partnership?</p>



	<p><b>Using a rights-based approach</b> - Where are we looking to grow our trees? Who has rights to the land where our trees will grow? Who decides on the long-term fate of that land? How can we ensure we are integrating the values and culture of our faith group and the wider community?</p> <p>It is important to be transparent and agree with rights holders on the rights and responsibilities and long-term benefits of the trees you are growing. Who will have the right to collect products from the trees in future?</p> <p>For larger projects the trees may generate profits; if they do, how will this be managed and shared? If one of the trees being grown falls on someone's house, who will be responsible for mitigating the damage caused? How will complaints or grievances be managed and by who in the partnership?</p>
<p>REMEMBER</p> 	<p>It is important to the success of your tree growing to consult with neighbouring landowners as the trees you are growing could affect the availability of sunlight, water, etc. Certain tree species may attract more wildlife which could increase predation on local farmers' crops if not managed properly.</p> <p>Listen to their concerns and adapt your plans accordingly, you may also want to explore how neighbouring land/rights owners could be brought into the partnership, as they may also become motivated to grow trees and restore areas of their land.</p>
<p>SOURCES OF GUIDANCE</p> 	<p>Use your faith group networks and platforms such as <a href="#">RESTOR</a> to identify potential partners.</p> <p>This can be an opportunity to engage a broad group of stakeholders including groups from your community that may need you to create more opportunities for them to engage with tree growing efforts such as youth groups, women and those with disabilities.</p> <p>Reaching out to potential partnership organisations to discuss your vision and purpose is a good starting point to become connected to the wider network of groups involved in tree growing and forest restoration.</p>
<p>CHECK </p>	<p><b>YOU HAVE HAD TECHNICAL ADVICE FROM LINKING WITH LOCAL EXPERTS AND YOUR COMMUNITY TO BUILDING ON LOCAL KNOWLEDGE AND EXPERIENCE.</b></p>
<p>WHY</p> 	<p>Technical advisors and local knowledge holders can recommend suitable native species to use and the benefits that certain tree species may have for nature, people and climate. They can share practical knowledge to increase the survival of the trees you are growing and achieve your long-term vision and purpose.</p>
<p>HOW</p> 	<p>Engage local knowledge holders such as neighbouring forest custodians and rights holders, they will have a unique and long-standing relationship with the forests in your area and can provide important foundational guidance you can build from.</p> <p>Reach out to local environmental NGOs, academic institutions, international environmental organisations and government experts, who can all provide additional insights and build on the local knowledge you have gained.</p>
<p>QUESTIONS TO ASK</p> 	<p>Are we able to identify local tree growing experts to advise us and support our partnership to think through the purpose of our tree growing? Do we have the funds to secure professional technical advice? Could we seek advice from local environmental NGOs, volunteers and other groups or connect to a government initiative?</p> <p>Have we looked at online platforms such as <a href="#">RESTOR</a>? Have we reached out to our wider faith group to see if there are experts or tree growing initiatives in our local area or region who we could ask for advice?</p>

<p>REMEMBER</p> 	<p>While technical advisors may not need to be formal members of the partnership, they could become important supporters of your partnership and bring new connections to help with the long-term success of your tree growing initiative.</p>
<p>SOURCES OF GUIDANCE</p> 	<p>Look to local forestry and other government agencies who are likely to have a database of organisations and people they are collaborating with in conservation, universities, botanical gardens and more.</p> <p>International agencies that have local offices such as <a href="#">UN Food and Agricultural Organisation (FAO)</a> and international platforms such as the <a href="#">UN Decade on Ecosystem Restoration</a> will have technical experts listed.</p> <p>Local forest custodians and farmers have a less formal but often deeper knowledge and understanding of the environment and native tree species from their long-term relationship with the area where you are seeking to grow trees and can provide key insights into the ecosystems in your area.</p>








STEP 3: DEVELOPING YOUR TREE GROWING PLAN




AGREEING ROLES AND RESPONSIBILITIES IN GROUPS AND BROADER PARTNERSHIPS, DEFINING SUITABLE LOCATIONS, IDENTIFYING HOW TO SECURE TREES FOR THE FUTURE, BUILDING FROM LOCAL KNOWLEDGE WITH ADDITIONAL TECHNICAL SUPPORT TO GROW YOUR TREES AT SCALE AND PACE, WHILE PLANTING FOR PERMANENCE

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STEP 3: DEVELOPING YOUR TREE GROWING PLAN	
CHECK	YOU HAVE DEVELOPED AND AGREED A PLAN AND TIMELINE FOR YOUR TREE GROWING
WHY	<p>A plan of your activities is important for outlining clearly for the whole partnership what roles and responsibilities people have, what they are expected to deliver and when. This will allow people across your partnership to have shared ownership of your tree growing efforts and contribute to achieving your vision and purpose.</p>
HOW	<p>Start with your core team and together develop a draft of your activity plan. Once you have a plan in place agreed by your team, the next step is to consult with your broader partnership to get technical advice on selecting and preparing the site, ensuring you have the right trees, in the right place at the right time, selecting and sourcing your tree species, the management and aftercare they need once planted and how you are going to share the learning from your efforts.</p> <p>Keep the activity plan in a place that is easily accessible by your team, so they can update it regularly and share the details of the revised plan easily with the rest of the partnership. It is important to regularly share the plan with your faith group and community.</p> <p>Being transparent with stakeholders interested in tracking your progress is key to ensuring your plan is inclusive and stays on track and can deal with potential concerns your wider community may have before activities are implemented.</p>
QUESTIONS TO ASK	<p>Who are the decision makers in the partnership? Who will be impacted by our initiative? How do we keep the right people informed and consulted on the plan as it develops and on the initiative's progress? Will we need volunteers? How do we engage them?</p> <p>How do we want to share the progress of our plan? Do we have a clear idea of how long different activities will take and the frequency they need to be carried out (e.g. regular watering in dry seasons)? Is it possible to integrate important dates in our community or faith calendars with our tree planting activity plan?</p>
REMEMBER	<p>Be prepared to be adaptable, as your plan will need to be reviewed and revised regularly based on the results of Step 5 &amp; 6. Ideally reviewing your plan regularly will happen more frequently at the start of your project, while there is a higher number of activities that will need to be completed.</p>
SOURCES OF GUIDANCE	<p>Consultation with technical partners such as NGOs actively engaged in forestry conservation could provide guidance on developing activity or work plans, as well as samples or templates of the same.</p> <p>Check out if there could be any experts in project planning and management within your faith community, as these people can also provide help.</p> <p>There are many workplan templates available freely online; spend some time choosing one that's right for your partnership.</p>



CHECK 	YOU HAVE SELECTED THE <u>RIGHT TREE SPECIES</u> FOR YOUR PURPOSE
WHY 	<p>It is important to select the <u>right tree species</u> to 1) meet the vision and purpose of your tree growing plan, 2) avoid harm to the local environment, 3) deliver sustainable multiple benefits and 4) be robust and durable.</p> <p>It is important to consider how you can create a sense of connection and value to the survival of these trees in your community through your species choices.</p> <p>Growing a variety of different tree species in your area will likely increase biodiversity and reduce the risk of losing trees to species specific pests or predators.</p>
HOW 	<p>It is important to identify the variables (season, water, light etc.) that could impact a tree’s abilities to survive and thrive. Visit your nearest intact standing forest - this might be a local protected area such as a national park, see which different tree species are growing well together - could you look to mirror this in your species choices? Native tree species are often the preferred species to use as they are the most adapted to growing in the environment you are planting in, seedlings can be more readily available, and provide food for wildlife. Using a mix of different native species can also assist the natural regeneration and recovery of native forests.</p> <p>Planting for permanence is key. By choosing to include tree species your faith-based group and/or other stakeholders' values will be important for their long-term protection. Including fruit tree species along with agroforestry species can also be popular as they can provide multiple benefits for people and wildlife.</p> <p>You may also seek to grow tree species that can support the recovery of biodiversity such as native wildlife species e.g. one that is being affected by the loss of certain tree species that are used for food or as a preferred habitat to live.</p> <p><b>For example:</b> <i>There are many wildlife species that play important roles in keeping trees and forests healthy e.g. by dispersing seeds. Species such as Hornbill birds like to nest in hollows in the trunks of trees, they prefer tree species that grow tall with large trunks.</i></p> <p>The Great Pied Hornbill in Assam India, prefers large trees such as the Bibhitaki tree (<i>Terminalia bellerica</i>) to nest in. The seeds of this tree (Bedda nuts) have a high fatty-acid content and can be used to make biofuel. By planting this native tree species, you can benefit, people, nature and climate.</p> <p>You may also seek to use non-native tree species, which can be faster growing and more readily available from commercial nurseries. However, we strongly recommend using native species. Non-native species are not naturally adapted to your local environment so will need more intensive management and care. This could include high water demands and the use of pesticides and fertilisers. Using non-native species will also need additional risk planning and consultation to ensure you have managed for any negative impacts they might have e.g. becoming invasive or increasing human wildlife conflict.</p> <p>Consider what is the best growth phase to plant out the different species you are considering. Each of these phases will have specific management requirements and may also need different growth conditions (appendix 2).</p>

QUESTIONS TO ASK 	<p>What are the different tree species that could meet our needs? How easy is it to grow these species? Will we need to plant different species over several years? Should we consider a composition between natives that are fast growers and slow growers, so we have a mix suitable to achieving our purpose? Do we grow additional plant species not just trees to support a diverse environment and potential benefits?</p> <p>What environment do these tree species need to grow best in? Are there species that are important to our faith, or have cultural value to our communities? Can the seeds or seedlings for these species be found locally and are they easily available? What are the costs of sourcing these saplings and from where? How long is the aftercare needed for the species once it is planted out?</p>
REMEMBER 	<p>Often fast-growing non-native species can result in negative impacts on local environments e.g. they could become invasive species that promote competition and damage local ecosystems, or they may need a lot more maintenance and additional draw on resources like water and fertilisers.</p>
SOURCES OF GUIDANCE 	<p>Consult within your faith institution on mapping faith lands and identifying possible areas for tree growing to inform your selection of suitable tree species to choose to grow.</p> <p>Local technical expert organisations such as universities, botanical gardens, protected areas, local community members as well as commercial nurseries will provide important information on the supply, maintenance and care of different tree species as well as the potential benefits they provide.</p> <p>Guidelines for optimal planting of different tree species (spacing, slope, aspect) can be obtained from government agencies in charge of environment or forestry, or from local technical and community partners.</p> <p>Identify suitable nurseries or other projects that could be the source of your seedlings/saplings.</p>







CHECK 	YOU HAVE SELECTED THE RIGHT PLACE TO GROW TO ACHIEVE YOUR VISION, MEET YOUR PURPOSE AND ENSURE YOUR TREES WILL CONTINUE TO SURVIVE
WHY 	<p>It is important to select the right place for your tree growing efforts to be successful. There are many different types of spaces where trees can be grown, your choice should be guided by the reasons you have agreed are important to the partnership including e.g. the motivation behind your tree growing, who has the agreed rights to growing trees, biophysical conditions, your trees species selection, where the presence of your trees can be secure in the long-term and where there are positive impacts of restoring trees to an area to create a woodland or forest grove.</p> <p>Proximity to your faith's main meeting place will also play a role in your selection as your partnership and your faith group will likely seek to have regular access to your area - not just during the planting but also for ease of access to the forested space you are creating for reflection and well-being purposes later once your trees have grown. This will provide a continuous and ongoing connection between your faith and the trees.</p> <p><b>For Example:</b> Areas identified for tree growing could include faith-owned land, private land owned by members of a faith group, farmlands owned by local community members, sacred groves, community and indigenous land/ forests, state land/forests, urban parks, schools, institutional or company land.</p>
HOW 	<p>Selecting your site and its size will determine the scale of your tree growing initiative – large-scale tree growing initiatives require a greater amount of area (land) or you may want to involve neighbouring areas to your site for a number of reasons; for example, the protection and restoration of local river systems or to build stronger relationships and collaboration within your community.</p> <p>It is critical to map, identify and agree the ownership and rights to the land where the trees are to be grown. It is important to understand how people are currently using the land and how this might change as the tree growing initiative is implemented and once the trees have grown.</p> <p>It is often more economical to grow trees in a single large location than in scattered locations, though you may seek to promote ecological connectivity across a landscape, where smaller sites are more appropriate. When choosing your site, you should also consider keeping your community engaged and travelling to the site for after-care and monitoring after you have planted out your seedlings.</p> <p>Biophysical conditions, such as water availability, soil, shade, slope will all influence what tree species you are able to grow so your site selection and tree species selection are highly interdependent.</p> <p>If your faith-based group does not have rights and access to its own land, then state or community areas could provide land for tree growing. This could be agreed through memoranda of understanding (MoU) with relevant agencies, e.g. through the government's <i>adopt-a-forest framework</i> in Kenya.</p>
QUESTIONS TO ASK 	<p>It is critical to use tools such as <a href="#">FPIC</a> prior to discussing land and resource rights with indigenous groups.</p> <p><b>Biophysical</b> – what are the biophysical and ecological conditions of the area? Rainfall, soil, flood plain winds, fires, etc? How might tree planting affect local water supply or other ecosystem services? Are there any known pests or predators of certain tree species present in the area?</p> <p><b>Scale</b> – Are we looking to grow trees at one site or multiple sites? Could we link up with neighbouring forest restoration efforts to expand or connect the site we are looking to grow trees? Do we want to restore parts of the land in phases over several years?</p> <p><b>People-centric</b> – Who owns the right to land and to the benefits the trees may produce in the future? Are there any potential conflicts that could arise that will need resolution before growing can happen? Who has the right to this land - is it faith-owned land or community land? Who needs to agree/approve the tree growing plan before we start? Once our trees start producing benefits e.g. fruit, who has or could be given the rights to them?</p> <p><b>Stewardship</b> – Is the location going to affect our ability to care for the trees after they are planted, to ensure their long-term survival? Is there an opportunity to get the trees legally protected under local or national laws or recognised as a community protected area?</p> <p><b>Species</b> – Should the area available be planted with trees only or other species? Could we consider agroforestry crops as well? Or species that support greater diversity of wildlife?</p>



<div>REMEMBER</div> <div></div>	<p>It is important to ensure growing trees in your chosen sites does not negatively impact the rights and access of communities living there and/or the human-wildlife coexistence or put pressure on water availability.</p> <p>You may wish to explore securing the future of your trees by seeking formal protection of the site in the long term, so you may choose a site where this can be an option.</p>
<div>SOURCES OF GUIDANCE</div> <div></div>	<p>Discuss within your faith institution how much land your institution is willing to set aside. You are planning for permanence so this will need full consultation and agreement with the rights holders to the land.</p> <p>Members of a faith community could offer their private land, but legal agreements are likely to be needed to secure the long-term future of the trees you plant.</p> <p>Consult state or local government agencies in charge of the environment to plant in government spaces.</p> <p>Opportunities may exist in land owned by institutions such as local schools.</p> <p>Government agencies responsible for agriculture could guide where farmlands could become involved in a more landscape level approach to restoration. Using approaches such as 'climate smart' or regenerative agriculture, or for larger areas land-use planning and designation approaches such as <a href="#">High Conservation Value (HCV)</a> approach, may be helpful.</p> <p>Development, government community outreach and other civil society groups can help in engaging and mediating with Indigenous People and Local Community Groups.</p>
<div>CHECK</div> <div></div>	<div>YOU HAVE SELECTED THE <u>RIGHT TIME</u> FOR PLANTING YOUR TREES TO ENSURE YOUR TREES WILL SURVIVE</div>
<div>WHY</div> <div></div>	<p>You need to identify what is the right time to plant the tree species you have chosen. This will ensure you have the suitable conditions for your trees to grow and thrive.</p>
<div>HOW</div> <div></div>	<p>Determine the best time of the year when planting and other related activities are most appropriate. This should be informed by environmental factors e.g. season and the rainfall regime, as well as socio-economic factors and ideally religious occasions that may occur in your faith calendar such as <i>Tu Bishvat</i> in the Jewish calendar, a day which promotes ecological awareness and tree planting to celebrate this.</p> <p>Knowing when the tree species you have chosen flower and fruit in the wild (Phenology) is important. These stages in a tree's life cycle are a good sign/trigger that the right environmental conditions for planting out are fast approaching. If you want to plant trees during the next rains, you will need to have planned to have enough seedlings growing in the nursery to be ready in time to plant out.</p> <p>As our climate changes, weather patterns are shifting so you may also need to consider how to maintain your seedlings in the nursery for an extended time until the conditions are right.</p>

<div>QUESTIONS TO ASK</div> <div></div>	<p>What could be the possible challenges e.g., for a reliable source of water? When do we have available manpower to support the transporting and planting? What species of trees are to be grown and what are the right biophysical conditions for them to get the best start?</p> <p>How long will it be from growing our trees in the nursery until they will be ready to plant out? Will we need to be aware of the presence of pests or predators at certain times of the year that could damage the seedlings we have planted out?</p>
<div>REMEMBER</div> <div></div>	<p>Our weather patterns are changing and becoming more unpredictable. You will need to understand the right conditions you need for the species you have chosen and track those conditions to identify the right time, which may not be when you expect, so you need to plan to be flexible to respond to the changes. You may want to consider employing climate smart approaches, such as phasing your planting and initially selecting and planting native tree species that are more resilient, with a higher chance of growing and surviving to more extreme or changing weather patterns. Once they become established you may be able to grow less robust but important species once shade and protection from the trees from your first planting efforts are established.</p>
<div>SOURCES OF GUIDANCE</div> <div></div>	<p>Government agencies in charge of delivering national and local environment/forestry efforts can be consulted.</p> <p>National weather agencies regularly track weather patterns over several years and can advise when you could expect it will be a good time to plant your saplings out.</p> <p>Universities/Forestry Departments may have research projects looking at the flowering and fruiting patterns of native species. This will inform when a suitable time is to plant out your saplings. They may be aware of the symbiotic relationship certain tree species may have with mycorrhizae, which promote growth and reduce the volume of fertilisers your saplings may need to grow. They can suggest what tree species are more adaptable and suitable to the changing climate in your area.</p> <p>Agriculture and Forestry Departments will track trends in the occurrence of pests and predators in your area and can alert you of risks.</p> <p>Municipal water companies manage water supplies in your area and may have future irrigation and water access plans that could impact the decision of your site selection.</p>





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CHECK 	YOU HAVE IDENTIFIED A SUSTAINABLE SOURCE OF SEEDLINGS/SAPLINGS TO SUPPLY YOUR TREE GROWING EFFORTS.
WHY 	<p>It is important to consider where you are sourcing your tree species seedlings from to plant out at your site, how many saplings you are going to need and when.</p> <p>Supply is important but so is ensuring you use quality seedlings or saplings that will grow into healthy trees. Your source needs to be sustainable. If you are looking to collect wild seeds/ seedlings or harvest cuttings from adult trees from a local natural forest, make sure you have the appropriate permissions and technical guidance of where, when and how many to harvest, so you do not negatively impact the forest's natural growth cycle.</p> <p>For example: Ensure the seeds originating from a native forest have only been harvested sustainably, so as not to impact the health and future growth of the forest they have been harvested from. Also, make sure that you will not be spreading any disease that could impact your restoration site or sites nearby.</p>
HOW 	<p>As well as local natural forests, there are many sources of seedlings and saplings: roadside nurseries, state nurseries, large commercial nurseries or your own nurseries. Establishing and managing your own nurseries can be more cost effective and provide you with an opportunity to engage with your broader community.</p> <p>You may also wish to co-run a nursery with other local groups looking to grow trees from seedlings. So, you can choose when they are robust enough to plant out, manage your supply and respond quickly to changing weather conditions. Running a nursery can also provide livelihood opportunities for members in your community.</p> <p><b>For example;</b> The <a href="#">Copaiba</a>, an NGO in the Atlantic Forest Brazil, tree nurseries are mainly women-led and provide gender equitable livelihoods to community members , providing easily accessible native saplings for community restoration efforts at a lower cost than commercial nurseries.</p> <p>Seedlings could be donated by partners, but this could present challenges such as quantity available, quality of saplings, timings that fit with suitable planting conditions, transport to the site and suitable species of trees.</p>
QUESTIONS TO ASK 	<p>Have we considered the quality and quantity of seedlings and included the associated cost in the budget? How will we transport the seedlings to the planting site(s)? If we have a tree seedling nursery, can it be located close to the planting sites?</p> <p>Are we looking at low waste options using sustainable seedling grow bags rather than plastic? Can we look at livelihood options attached to developing our own nurseries? Is there a corporate or government partner who could provide seedlings?</p>
REMEMBER	<p>Growing seedlings to the right age when they can be planted outside of the nursery takes time so make sure you factor this into your plan. It is also important to think about when your seeds from your chosen species will be available, for some native species this could be only every seven years.</p>
SOURCES OF GUIDANCE 	<p>Support to establish your own nursery could be obtained from state agencies of environment or local technical organisations.</p> <p>In kind (time, transport) or donation of resources such as seedlings can also help your tree growing partnership. This could be from private sector actors near planting sites or people within your community.</p> <p>Proactively engage potential resource providers such as local forestry/agroforestry companies that may provide sapling off cuts or tree nursery products.</p>



CHECK 	YOU HAVE A BUDGET/FINANCIAL PLAN, SO YOU CAN COMPLETE ALL 6 STEPS
<p><b>WHY</b></p> 	<p>It is critical to the success of your project to assess and understand the full cost of your tree growing efforts across the lifespan of your trees. This will help inform what tree species you choose to plant as some species, particularly those that produce high value crops are more costly to buy than others. However, they are also the species that can bring additional benefits to your community including possibly bringing funds in to support their maintenance e.g. natural rubber and fruit trees such as mango/apple.</p> <p>The size and scale of your tree growing efforts will need to be considered, to ensure you have sufficient funds to care for your trees as they grow and thrive. The first year or two of your initiative will likely be the costliest as they include various tree planting activities as well as monitoring and maintenance as your saplings establish themselves.</p> <p>Your immediate financial plan will need to span at least four years, but you should also consider how you are going to financially support the stewarding of your trees into the future, actively monitoring them and managing the benefits they produce.</p> <p><b>For example:</b> <i>The tree species you choose may require additional care (watering, feeding, pest and invasive species management) for at least four years after planting.</i></p>
<p><b>HOW</b></p> 	<p>Review your activity plan and timeline, use this to identify what your delivery costs will be. Activities are useful for breaking up the budgeting (activity-based budgeting approach).</p>
<p><b>QUESTIONS TO ASK</b></p> 	<p>Do we know how long we need to actively care for the seedlings as they grow and what resources we need to provide? Have we checked out and used market-rate costs for goods and services?</p> <p>Have we included an itemised budget based on proposed activities and worked through the checklist? How are we going to steward our trees and their produce and ensure the benefits they provide reach the right stakeholders?</p>
<p><b>REMEMBER</b></p> 	<p>Think about what the hidden costs or contingency costs might be e.g. caring for your growing trees by protecting them from browsing by cattle or infection from pests.</p>
<p><b>SOURCES OF GUIDANCE</b></p> 	<p>Local technical partners such as universities, botanical gardens, government forestry departments, can help you with identifying costs of goods and services you may need.</p> <p>Consulting people with skills in accounting and project management can help and sourcing volunteers with these skill sets to support sound management of the project is important.</p> <p>Local accountancy firms may provide in kind pro-bono support as part of their CSR commitments.</p> <p>If you have charity status you may be entitled to a reduction in costs or be able to claim tax rebates.</p>



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STEP 4: IMPLEMENTING YOUR TREE GROWING PLAN

SUCCESSFULLY SOURCING, PLANTING AND GROWING THE RIGHT TREES, IN THE RIGHT PLACE AT THE RIGHT TIME TO ACHIEVE YOUR VISION AND PURPOSE

STEP 4: IMPLEMENTING YOUR TREE GROWING PLAN	
CHECK	YOU HAVE SECURED THE RESOURCES YOU NEED TO SUPPORT YOUR TREE GROWING INITIATIVE
WHY	<p>Tree growing requires a number of different resources e.g. financial and human resources in your partnership. This could include securing the support of volunteers and youth groups in your faith group, which could contribute a variety of skills to the success of your initiative.</p> <p>In this step we will focus on financial resources. It is important to diversify your sources of funding where possible and not be heavily reliant on a single source of funding. This will ensure the sustainability of your initiative.</p>
HOW	<p>You will need to map out the resources you need to implement the activities in your plan. You need to consider the time it will take to secure, implement, monitor and promote your tree growing initiative and how the funding levels you need to support your initiative may change over time. You may find different donors will be interested in supporting different elements of your initiatives.</p>
QUESTIONS TO ASK	<p>What are the potential sources of funding available to us? Does our immediate faith group have internal resources, or could we call on our wider faith community? Are there Government funds available?</p> <p>If you are part of a broader faith-based or community effort, are there development funds available? Could our initiative be eligible for support from external donors? Across the partnership, do we have the resources to support the entire process of tree growing?</p>
REMEMBER	<p>There can be lots of opportunities in tree growing to collaborate with other groups also seeking to grow trees. Collaboration will help reduce costs and build shared learning and expertise.</p>
SOURCES OF GUIDANCE	<p>Check out websites of donor agencies for announcements of calls for proposals.</p> <p>You may have volunteers with fundraising skills to help you apply for grants or organise fundraising events to mobilise funds from several different sources.</p> <p>There are a number of online fundraising platforms dedicated to providing support for tree growing efforts that might be able to provide financial support.</p> <p>Consider the possibility of your trees providing some form of income that could support the long-term maintenance and management of your forest plot. This could be through creating a visitor experience for your faith group and other visitors as a space for reflection which you could rent-out for a small fee, or exploring the economic value of some of the non-destructive products your tree species can produce as they grow. These non-timber forest products (NTFPs) could include food products such as nuts or fruits, medicinal products like neem and resins such as natural rubber/latex.</p> <p>Explore the markets local to your partnership and speak to local agroforestry groups and see what might be possible for you to connect into to sell the products of the trees you are growing. If this is a viable business avenue you will be looking to explore, this should also inform the refinement of your vision and purpose and your tree species choice.</p> <p>See Appendix 1 for examples of what to include in your budget.</p>



CHECK 	YOU ARE SUCCESSFULLY FOLLOWING YOUR TREE GROWING PLAN
WHY 	By following and adapting your plan as your partnership learns more about your site, your stakeholders and the trees you are growing, communicating with your partnership and sharing your knowledge externally. You will be successfully sourcing, planting and growing the right trees, in the right place at the right time and working towards achieving the purpose and vision of your tree growing initiative.
HOW 	As you deliver your plan it is important to check in regularly with your partnership and reconfirm everyone is happy and aware of their roles and responsibilities. Regularly undertake progress checks and reflect on what you have been learning, discuss these reflections within your partnership and consult with your local stakeholders and technical advisors if and when needed. Whether your plan needs to be adapted, or changed, and/or if conditions have changed since it was last reviewed these changes need to be shared and agreed with everyone. This is a crucial part of adaptive management and is an important approach as activities, partnership management etc do not always happen exactly as planned, just as nature can be unpredictable.
QUESTIONS TO ASK 	<p>Do we need to adjust our plans if weather conditions are becoming more unpredictable or extreme? Has the area become prone to pests, or damage by livestock and/or wildlife? Will some form of protection be required? Have the weather patterns this year shifted so the trees may need additional water or shade for protection?</p> <p><b>For example:</b> <i>Ensure you are planning for how your trees will look in the future e.g. when planting your trees, knowing what is the appropriate spacing they will need to accommodate the size of their canopy when full-grown: the larger the canopy, the wider the spacing.</i></p>
REMEMBER 	It is important to be responsive as conditions change and to adapt when they do. Use the partnership agreement and platforms you have in place to identify and agree on changes as you implement your plan. When you update your plan, be transparent and share the changes with your wider stakeholder group.
SOURCES OF GUIDANCE 	<p>Consultation with technical partners such as state departments in charge of forestry are important as they will be aware of any potential risks e.g. extreme weather, pests, diseases, which can negatively impact the delivery of your plan.</p> <p>Learn from others. Partners can share examples of plans for similar areas and experience in designing and delivering them.</p>





STEP 5: STEWARDSHIP OF YOUR TREES AS THEY GROW

CARING FOR YOUR TREES AS THEY GROW, BECOMING STEWARDS USING LOCAL AND TECHNICAL KNOWLEDGE, MONITORING TREE GROWTH, EVALUATING THE SUCCESS OF YOUR TREE GROWING PLANS AND SHARING BENEFITS.

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STEP 5:STEWARDSHIP OF YOUR TREES AS THEY GROW	
CHECK	YOU HAVE A MONITORING, EVALUATION AND REPORTING (M&E) PLAN TO HELP YOU CARE AND STEWARD YOUR TREES TO ACHIEVE THEIR FULL POTENTIAL
WHY	<p>Monitoring and reviewing the results of this monitoring (Evaluation) will help you care for your trees as they grow, become effective stewards caring for your trees (building from local and technical knowledge), monitor tree growth, evaluate the success of your tree growing plans and share the benefits they produce. The knowledge and experience you are gaining can also feed into a community of practice, within your faith-based group and beyond. So having a clear M&amp;E plan is an important tool to share your learning as well as to understand and demonstrate what good forest restoration looks like for your partnership.</p>
HOW	<p>Tracking the progress of tree growing plans will support your ability to care and steward your trees as they grow, become self-sustaining and need less care. Start your monitoring plan before you plant so you have a record of the baseline conditions and can track how the site is changing over time.</p> <p>In your monitoring plan capture key information such as date of planting, types of species, number of seedlings planted, location of saplings planted, management regime (watering, pest management etc), growth (height, circumference) and survival. You may also want to monitor productivity (fruiting/flowering) to track the health of the trees and the benefits they are providing.</p> <p>This is the type of information that is needed not only to steward your trees, but also to be transparent with donors/sponsors who are providing financial support to your initiative. It will also help your partnership shape your ideas of what good forest restoration looks like. How you have achieved your objectives and the trees you have grown are providing benefits for people, nature and climate. Taking photographic pictures to visually track your progress is an easy component of a monitoring plan.</p> <p>Assigning at least one member of your partnership to oversee this and any volunteers that may wish to help is good for consistent monitoring methods and data management.</p>
QUESTIONS TO ASK	<p>What methods have we agreed on to use? Who will be involved in the monitoring and caring? How will they collect the monitoring data? Will they need additional equipment/skills? Have we agreed how to document and report progress on a regular basis?</p> <p>Who will review and evaluate the data and share the results of this evaluation? Will this be accessible to the whole partnership? What records do we need to keep? Have we obtained the relevant consent to record, store, and analyse the data? Do we have any legal or donor requirements to share these data? Do we need to revise what good looks like to our partnership and if so do we need to revise our objectives?</p>
REMEMBER	<p>Monitoring helps everyone to gain important knowledge along the way, to be responsible and share the results and learn lessons on how to improve future practices. How to monitor success and the required improvements will ensure the long-term survival of trees you are growing. Make sure you include after planting care and management activities in your workplan and budget.</p>
SOURCES OF GUIDANCE	<p>There are several platforms and tools to help you with your monitoring and reporting.</p> <p>Trillion Trees Monitoring App FORMAPP will be released in early 2023. This will be a free, simple and easy-to-use open access resource for your smartphone. It will enable groups to monitor where tree growing is happening, who the rights holders are, as well as the types of species growing and their survival.</p> <p><a href="#">RESTOR</a> is an online platform to share the location of your tree growing efforts, get advice on the biophysical conditions you have and is in the process of developing guidance on suitable tree species to plant.</p> <p>Local media houses can be instrumental in providing high resolution photography and reporting.</p>









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# STEP 6: SHARING KNOWLEDGE AND CONNECTING TO THE GLOBAL MOVEMENT

CONTRIBUTING TO THE GLOBAL MOVEMENT THROUGH CONNECTING AND SHARING YOUR KNOWLEDGE AND EXPERIENCES GAINED DURING YOUR TREE GROWING EFFORTS, THE CHALLENGES YOU FACED AND HOW YOU HAVE OVERCOME OR LEARNED FROM THEM, COMMUNICATING AND CONNECTING TO PROMOTE #GENERATIONRESTORATION ACROSS YOUR LOCAL AND GLOBAL COMMUNITY

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STEP 6: SHARING KNOWLEDGE AND CONNECTING TO THE GLOBAL MOVEMENT	
CHECK 	YOU ARE NOW SHARING THE RESULTS OF YOUR TREE GROWING EFFORTS AND ARE PART OF THE GLOBAL RESTORATION MOVEMENT AND CONTRIBUTING TO GLOBAL SUCCESS
<b>WHY</b> 	<p>Your partnership can be a champion for restoring the benefits trees can bring to your community and nature. By sharing your knowledge, experience and results of your tree growing efforts, challenges you faced and how you have overcome them, you will strengthen global knowledge and understanding of tree growing. You can act as a multiplier to support forest restoration, whether for sacred groves, woodlots, urban greening, or larger landscape-scale forest restoration.</p> <p>The experiences you share can help to successfully build our collective resilience to the Earth's changing climate. By communicating your experiences, you will be connecting to a global movement and be part of our #generationrestoration.</p> <p>At this point in your tree growing journey, this is a great moment to engage and share your progress with your community and demonstrate what is possible to achieve together. It is also important for this to connect to other restoration efforts local to you, including those seeking to ensure that drivers of tree loss are being tackled so the trees that you are growing are protected.</p> <p>The knowledge you have gained (whether it be through success or learning through failure) all play an important contribution to the global movement for restoring nature.</p>
<b>HOW</b> 	<p>It is important to decide on the messaging you want to communicate within your partnership and externally about your tree growing initiative.</p> <p>It is important to include, as part of your planning and regular partnership meetings, consultation with your stakeholders involved on the language, tone and audiences for the messages you would like to share from your initiative.</p> <p>Your faith group may already have a tree growing initiative which you can reach out to share and communicate your work to date for example;</p> <ul style="list-style-type: none"> <li>• The Anglican Faith's Communion Forest global initiative '<i>To plant is to hope, To restore is to heal, To protect is to Love</i>';</li> <li>• The Sikh Faith's EcoSikh '<i>Care for Nature Care for All</i>' Programme</li> <li>• The Roman Catholic Faith's Laudato Si Movement '<i>inspiring and mobilizing the Catholic community to care for our common home and achieve climate and ecological justice</i>'.</li> </ul> <p>When looking for and communicating knowledge about your tree growing efforts on social media use the hashtags #generationrestoration, #Faith4Nature, #Faith4Earth</p> <p>This could include public campaigns, awareness raising, delivering training or knowledge sharing workshops for different groups, or developing resources, materials, sharing progress and success stories via newsletters or on social media channels.</p> <p>You can share your experiences through online platforms like <a href="#">RESTOR</a>, faith events, societies like the <a href="#">Society of Ecological Restoration</a>, global platforms such as <a href="#">UNEP Faith for Earth</a> and <a href="#">UN Decade</a> national coordinating hubs.</p>
<b>QUESTIONS TO ASK</b> 	<p>Are there events and opportunities within our faith community where we could talk about and promote our work? How could we include activities that emphasise and strengthen the faith component?</p> <p>Consider how tree planting could be encompassed in your prayer/liturgical life. This can help shift hearts and minds to engage with your programme. How can the traditions of that faith community be included when trees are being planted - e.g. blessing of the land and the trees? Also, who might do the planting to engage the wider community in the future – children, dignitaries, women etc?</p>

<b>REMEMBER</b> 	<p>There are lots of faith-based and community groups and others looking to undertake small-scale restoration and tree growing projects, so sharing experiences and learning are critical to the success of restoring the environment we care for, and all rely on for our survival.</p>
<b>SOURCES OF GUIDANCE</b> 	<p>For sharing the experiences of how you have delivered your tree growing initiative - the <a href="#">Society for Ecological Restoration</a> and IUCN have a number of platforms and events where you can share these and learn from others. The <a href="#">RESTOR</a> platform also provides a great space for you to share your projects and interact with other groups restoring in your areas as well as the wider forest restoration community.</p> <p>Media partners can be instrumental in publicity of events and awareness raising, particularly at important events and times such as World Environment Day (5 June), International Day of Forests (21 March) or Interfaith Harmony Week (1-7 February).</p> <p>The <a href="#">UN Decade on Restoration</a> website has a great number of resources to support communicating and talking about your tree growing efforts.</p>



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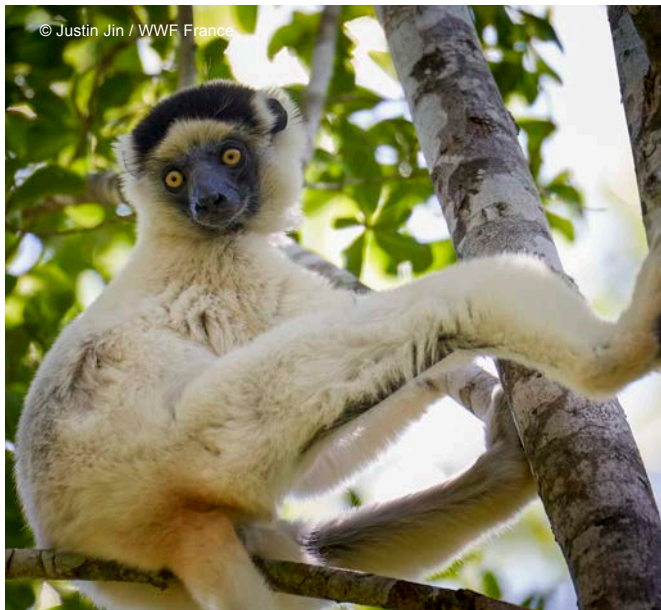




RESTORING BENEFITS FOR PEOPLE, NATURE AND CLIMATE  
AS YOUR TREES GROW









# SECTION 4

## ENSURING YOUR TREE GROWING INITIATIVE DOES THE MOST IT CAN

Through each of these steps as a faith-based group involved in forest restoration initiatives you can be proud of what you have achieved so far in your tree growing journey. This checklist has been designed to help you to become an active member of the global restoration movement and the [UNEP Faith for Earth Initiative](#) and to use this as an opportunity for your engagement in this global movement to last.

In 2021 the UN announced that 2021-2030 would be the [UN Decade of Ecosystem Restoration](#). This important time in our history was created to inspire and support a global movement to prevent, halt and reverse the degradation of all ecosystems across the world.

The UN Decade [website](#) is a platform for sharing and learning experiences from groups like yours, who are working to repair and restore ecosystems across the world. It contains knowledge, inspiring case studies, tools and additional guides to help you on your tree growing journey.

Core to the UN Decade's approach are [10 Guiding Principles](#) for Effective Ecosystem Restoration. The steps

developed for this guide are aligned to these principles and best practices and enable you to connect to the global restoration movement through your tree growing efforts.

Most recently the UN Decade in collaboration with IUCN has developed [the IUCN Community Organising Toolkit](#), which walks you through the importance of community organising to equip you as change makers with the tools, knowledge and resources necessary to restore your ecosystems. While its focus is beyond trees and forests it provides links to a wealth of tools including online and financial resources and is highly complementary to this guide.




















TEN PRINCIPLES THAT UNDERPIN ECOSYSTEM RESTORATION\*

1		<b>GLOBAL CONTRIBUTION</b> Ecosystem restoration contributes to the UN sustainable development goals and the goals of the Rio conventions
2		<b>BROAD ENGAGEMENT</b> Ecosystem restoration promotes inclusive and participatory governance, social fairness and equity from the start and throughout the process and outcomes
3		<b>MANY TYPES OF ACTIVITIES</b> Ecosystem restoration includes a continuum of restorative activities
4		<b>BENEFITS TO NATURE AND PEOPLE</b> Ecosystem restoration aims to achieve the highest level of recovery for biodiversity, ecosystem health and integrity, and human well-being
5		<b>CAUSES OF DEGRADATION</b> Ecosystem restoration addresses the direct and indirect causes of ecosystem degradation
6		<b>KNOWLEDGE INTEGRATION</b> Ecosystem restoration incorporates all types of knowledge and promotes their exchange and integration throughout the process
7		<b>MEASURABLE GOALS</b> Ecosystem restoration is based on well-defined short-,medium- and long-term ecological, cultural and socio-economic objectives and goals
8		<b>LOCAL AND LAND/SEASCAPE CONTEXTS</b> Ecosystem restoration is tailored to the local ecological, cultural and socio-economic contexts, while considering the larger landscape or seascape
9		<b>MONITORING AND MANAGEMENT</b> Ecosystem restoration includes monitoring, evaluation and adaptive management throughout and beyond the lifetime of the project or programme
10		<b>POLICY INTEGRATION</b> Ecosystem restoration is enabled by policies and measures that promote its long-term progress, fostering replication and scaling up

\* <https://www.fao.org/documents/card/en/c/CB6591EN>

THE GUIDE FOR FAITH BASED ACTORS AND THE UN DECADE OF ECOSYSTEM RESTORATION

CHECKLIST		UN DECADE	
 <b>1. PURPOSE</b> Agreeing your purpose for tree growing	Providing space for reflection and prayer, growing spiritually significant species, tree species that can deliver food security for people and/or wildlife, rare or threatened native species, connecting green spaces in urban or rural areas, growing trees for future generations.	 <b>PRINCIPLE 4</b> Benefits to nature and people	Ecosystem restoration aims to achieve the highest level of recovery for biodiversity, ecosystem health and integrity, and human well-being.
 <b>2. PARTNERSHIPS</b> Building your tree growing partnership	Creating opportunities for inter-faith and cross-generational collaboration, learning from experiences within and without, outreach opportunities with community, connecting to technical advisors to realise your purpose and what resources are needed.	 <b>PRINCIPLE 5</b> Causes of degradation	Ecosystem restoration addresses the direct and indirect causes of ecosystem degradation.
		 <b>PRINCIPLE 2</b> Broad Engagement	Ecosystem restoration promotes inclusive and participatory governance, social fairness and equity from the start and throughout the process and outcomes.
 <b>3. PLANNING</b> Developing your tree growing plan	Agreeing roles and responsibilities in group and broader partnership, defining suitable locations, identifying how to secure the trees for the future, building from local knowledge with additional technical support to grow your trees at scale and pace, while planting for permanence.	 <b>PRINCIPLE 6</b> Knowledge Integration	Ecosystem restoration incorporates all types of knowledge and promotes their exchange and integration throughout the process.
		 <b>PRINCIPLE 3 -</b> Many types of activities	Ecosystem restoration includes a continuum of restorative activities.
 <b>4. IMPLEMENTING</b> Delivering your tree growing plan	Successfully sourcing, planting and growing the right trees, in the right place at the right time to achieve your vision and purpose.	 <b>PRINCIPLE 8 -</b> Local and land/ seascape context	Ecosystem restoration is tailored to the local ecological, cultural and socio-economic contexts, while considering the larger landscape or seascape.
		 <b>PRINCIPLE 7:</b> Measurable goal	Ecosystem restoration is based on well-defined short-, medium- and long-term ecological, cultural and socio-economic objectives and goals.
 <b>5. STEWARDSHIP</b> Caring and managing your growing trees	Caring for your trees as they grow, becoming stewards using local and technical knowledge, monitoring tree growth, evaluating the success of your tree growing plans and sharing benefits.	 <b>PRINCIPLE 9:</b> Monitoring and Management	Ecosystem restoration includes monitoring, evaluation and adaptive management throughout and beyond the lifetime of the project or programme.
 <b>6. SHARING</b> Contributing to the global movement	Connecting and sharing your knowledge and experiences gained during your tree growing efforts, the challenges you faced and how you have overcome or learned from them, communicating and connecting to #generationrestoration	 <b>PRINCIPLE 1:</b> Global Contribution	Ecosystem restoration contributes to the UN sustainable development goals and the goals of the Rio conventions.



# SECTION 5

## SOME IMPORTANT LINKS

- UN Decade of Restoration <https://www.decadeonrestoration.org/>

### EXAMPLES OF FAITH ACTION FOR GROWING TREES

- EcoSikh: <https://ecosikh.org/>
- Green Anglicans: <https://www.greenanglicans.org/plant-a-celebration-tree/>
- FaithPlans Webinar: <https://www.faithplans.org/post/webinar-faith-plans-and-faith-based-tree-growing>
- UNEP Faith For Earth Initiative Helpful links  
[https://www.unep.org/about-un-environment/faith-earth-initiative?\\_ga=2.123015311.541985313.1648133540-1313906548.1645477131](https://www.unep.org/about-un-environment/faith-earth-initiative?_ga=2.123015311.541985313.1648133540-1313906548.1645477131)
- Interfaith Rainforest Initiative: <https://www.interfaithrainforest.org/>
- Restoration primers/guides  
<http://www.interfaithrainforest.org/wp-content/uploads/2021/06/IRI-forest-restoration-primer-Final.pdf>
- Country specific forest restoration primers/guides for Brazil, Colombia, DRC, Indonesia and Peru, which can be found here: <https://www.interfaithrainforest.org/issue-primers/>

### EXAMPLES OF THE ROLE OF FAITH IN TREE GROWING

- Mucunguzi et al 2021 *The role of the faith-based organisations in tree planting in Uganda: International Journal of Environmental Studies: Vol 79, No 3* ([tandfonline.com](https://www.tandfonline.com))
- The value of trees in Islam *The Value of Trees in Islam — Khaleafa*
- Dalai Lama – *Practical Steps Towards Protection of the... | The 14th Dalai Lama*

### EXAMPLES OF HOW TO BUILD A PARTNERSHIP AND COMMUNITY ACTIONS

- IUCN's Community Organising Toolkit
- <https://www.decadeonrestoration.org/publications/community-organizing-toolkit-ecosystem-restoration>
- Community Organising Training Manual -International Work Group for Indigenous Affairs (IWGIA): [https://www.iwgia.org/images/publications/0647\\_COT\\_manual.pdf](https://www.iwgia.org/images/publications/0647_COT_manual.pdf)
- IUCN's Grassroots Community Action: [www.restoreyourcommunity.org](http://www.restoreyourcommunity.org)

### EXAMPLES OF TECHNICAL SUPPORT

- IUCN Terminology for Types of Restoration [https://www.iucn.org/sites/dev/files/content/documents/2021/iucn\\_restoration\\_intervention\\_typology.pdf](https://www.iucn.org/sites/dev/files/content/documents/2021/iucn_restoration_intervention_typology.pdf)
- Free Prior Informed Consent (FPIC) Helpful Links and Tools <https://www.forestpeoples.org/en/lands-forests-territories-law-policy-global-finance-trade/training-tool/2017/resources-free-prior>
- Forest Stewardship Council FPIC Guidelines  
<https://fsc.org/en/document-centre/documents/resource/332>

### HOW TO PLANT AND GROW TREES

- Minnesota State Government
- [Appendix One: How to plant saplings and seedlings and care for a tree- All About Minnesota's Forests and Trees: A Primer \(state.mn.us\)](#)
- UN Decade of Restoration - [Tree planting and ecosystem restoration: a crash course | UN Decade on Restoration](#)
- American Forest Foundation - [Create Healthier Woods | My Land Plan](#)

### GLOSSARY OF FORESTRY TERMS

- [Ministry of Forests and Range Library - Glossary of Forestry Terms in British Columbia \(gov.bc.ca\)](#)

### EXAMPLES OF FAITH INITIATIVES SUPPORTING GROWING TREES

- Anglican Faith '[Communion Forest](#)'
- Sikh Faith - [EcoSikh](#)
- Roman Catholic Faith [Laudato Si](#)
- [Dawt-e-Islami Mosque](#), Birmingham UK
- Interfaith tree growing [Interfaith Tree Planting Project - Strengthening Faith Institutions \(SFI\) \(sfitogether.org\)](#)

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APPENDIX I: BUDGETING GUIDE

The items list below list outlines some of the typical costs you will need to consider as you design and cost out your tree growing plan.

Table of typical restoration costss (derived from [Trillion Trees](#) and [TEER](#) assessments)

TYPICAL EXPENDITURE	DESCRIPTION	EXAMPLES OF COSTS
PERSONNEL	Staff (should account for the true cost of staff time, i.e. including benefits, etc)	
OFFICE COSTS	Office expenses	Rent, maintenance, phone & internet fees, etc
SUB-CONTRACTORS	Any other contracted personnel/ advisors, or direct payments	Any other contracted personnel/ advisors, or direct payments for labour or services related to growing your trees
VOLUNTEERS UNPAID LABOUR	Restoration projects are likely to demand time from local populations, either directly in the implementation of the activities or through their presence at informational meetings, consultations, etc.	You may wish to record this for any donors as it can be accounted for as an economic investment from the community in the restoration project
PROJECT ASSETS	Includes the investment and operating costs linked with the infrastructure and equipment hired by the project for its implementation	Examples include costs of first acquisition, depreciation, maintenance costs for things like vehicles, machinery, buildings and land, field equipment
TRAVEL AND TRANSPORT	Travel-related expenses and transportation for personnel or contractors, including Daily Subsistence Allowance if required	Vehicle insurance and maintenance
MATERIAL	Material goods and supplies	Construction of temporary structures directly linked to the intervention (e.g., tree nursery, fences)
CONSUMABLES	This category includes the cost of supplies used on a specific intervention unit or at the project level	This includes seeds and seedlings, fertilisers and herbicides, food for workers
MEETING COSTS	Includes all expenditures related to the organisation of meetings related to the intervention unit or at the project level	Venue hire, per diems, food, travel costs
COMPENSATION FOR LAND NOT USED OR INCOME FORGONE	Includes any compensation in kind or in cash that is given to farmers and/or land users to compensate for the loss of land use or modified practices	



ACTIVITIES THAT YOU MAY UNDERTAKE	DESCRIPTION	EXAMPLES OF TYPICAL RELATED OF COSTS
MANAGEMENT & COORDINATION	Project-level management and oversight, are not captured in local office admin costs and personnel costs	Printing (e.g., recruitment, advertising), Financial audit, Bank fees, Office supplies, Planning meetings, Government support
STAKEHOLDER ENGAGEMENT	Community-based process to engage relevant stakeholders for the purpose of defining and achieving outcomes, developing implementation strategy	Baseline assessment (socio-economic), stakeholder mapping, participatory land use mapping, workshops for community level agreements for lands to be used, rights and benefit sharing agreements, FPIC
PREPARATION	Refers to site work and preparation activities prior to establishment. May also include collection of seed and nursery set up costs	Baseline assessment (Biophysical site conditions, biodiversity), Field mapping, Mapping and/or geodata basing of sites, Site preparation for growing
ESTABLISHMENT	Restoration activities to establish the restored site. May include preparing the site for planting, and the sourcing and planting of seedlings, or clearing weeds in the case of assisted natural regeneration	Sourcing of Seedlings, clearing weeds, possible nursery costs if you want to establish your own, transportation of seedlings, planting, removal of any waste resulting from planting
MAINTENANCE	Additional site care or community-support needed following planting, natural regeneration, or other establishment activities	Weeding, Fertilizer, Herbicide, Termiticide, Fungicide, Fire protection, later canopy management, harvesting of tree products e.g. fruit, rubber etc
MONITORING	Observing, tracking, and assessing the progress and outcomes over a period of time; keeping under systematic review. Goals include accountability, adaptive management, short-term and long-term effectiveness	Survival monitoring, Biodiversity surveys, Social impact surveys, Smartphone, camera, paper, storage (cloud or physical storage of data sheets), regular visit costs, technical experts to review results, meeting to review results and adapt accordingly

Sample budget from the first phase of a tree growing project in Kenya. This uses an activity-based itemised budget for two activities: training workshops and public campaigns, with currency in Kenya Shillings (KES).

DESCRIPTION OF ACTIVITY	DESCRIPTION OF UNIT	NUMBER OF UNITS	UNIT COST (KES)	FREQUENCY	TOTAL (KES)
OBJECTIVE: BUILD CAPACITY OF FAITH LEADERS IN FOREST LANDSCAPE RESTORATION					
ACTIVITY 1: Training Workshop for 10 Faith Leaders for 3 days once per quarter	Hall hire	3 (1x 3 days)	5,000 per day	4 per year	60,000
	Meals for one day (breakfast and lunch per person)	30 (3x10) meal packs for 3 days	800 per person per day	4 per year	96,000
	Drinking water	30 (1x3x10) litres per training	100 per litre	4 per year	12,000
	Stationery per participant (pack of pen, notebook and folder)	10 (1x10) packs per training	300 per pack	4 per year	12,000
	Accommodation	30 (3 nights for 10 people) per training	2,500 per person per night	4 per year	300,000
ACTIVITY 2: Public Tree Planting Campaigns (to plant 2000 trees) twice per year	Production of 1000 flyers	1000 pieces	100 per piece	2 per year	200,000
	Production of 5 thematic banners per campaign	5 pieces	5000 per banner	2 per year	50,000
	Purchase of 2000 tree seedlings	2000 seedlings	30 per seedling	2 per year	120,000
	Transportation of seedlings to planting site(s)	2 return trips by truck	5,000 per trip	4 per year	20,000
	Hole preparation 2000 (holes)	2000 holes	20 per hole	2 per year	80,000
	Labour for planting	2000 seedlings	15 per seedling	2 per year	60,000
	Tools (50 hoes)	50 hoes	350 per hoe	Once	17,500
	10,000 litres of water for trees	1 water boozier	20,000 per boozier	2 per year	40,000
	Drinking water for 50 people	50 (1 Litre per person)	100 per litre	2 per year	10,000
	Snack for 50 people	50 packs (1 pack/ person)	200 per pack	2 per year	20,000
TOTAL					1,097,500

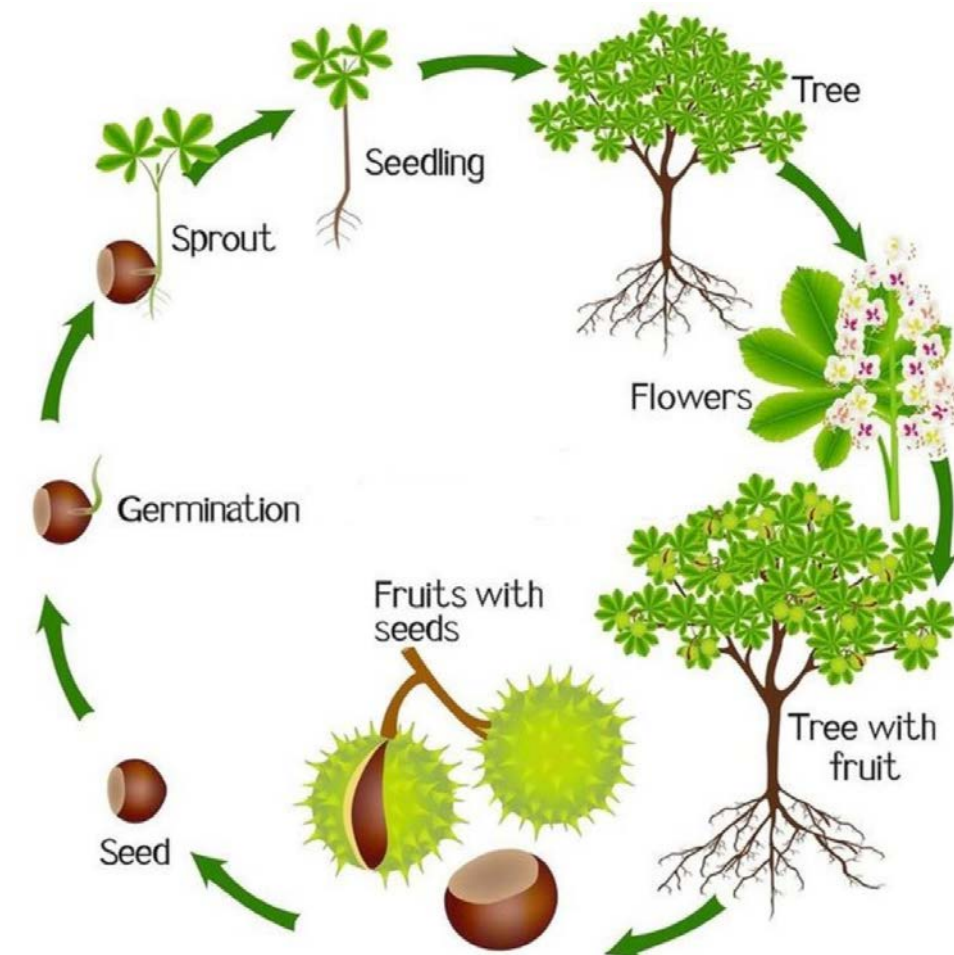
**Note:** The activity-based cost items listed in this sample budget are by no means exhaustive, but only serve to give a fair guideline on what an itemised budget would look like.





## APPENDIX II: GROWTH PHASES OF TREES

Typical Life Cycle of a Tree (Emami 2021)



Seed, sprout, seedling, sapling and tree are the distinctive growth phases of a plant or a tree. The growth of seedlings, saplings and trees growth is measured in two ways height 1) from base to top of the crown or 2) DBH. DBH stands for Diameter at Breast Height, it is the diameter of the main stem or trunk of a plant at a height just below the first branch separation, for adult trees approx. at 1.30 metres from the ground.

**Seeds** are the first ‘embryonic’ growth stage of a tree; they have a covering called the seed coat and are usually with some stored food to aid them to germinate and grow. Seeds can be dispersed (transported) away from the parent tree by 5 possible methods; wind, predated on by animals, water gravity, and ballistic. The shape and size of the seed is determined by its dispersal methods. This will inform how to manage your trees as you grow (e.g. need anti-predation protection) and what impacts your trees may have on surrounding land as they grow e.g. if dispersed by wind, ballistic they will colonise nearby sites.

**Seedlings** are the second growth stage of a tree, they are the young plants growing from germinated seeds, they are thin (around 1 inch/2.5cm DBH or less\*) with young juvenile leaves. Often lower cost to buy but they will need more management and are attractive to browsers like deer and small mammals like squirrels.

**Saplings** are the juvenile growth stage of a tree, their stem is around 3-15 cm in DBH\*, with adult leaves. Saplings can grow from seedlings or from cuttings from adult trees. Those grown from seedlings are likely to be more costly seedlings but will likely have a higher survival rate when planting out. They will need regular watering and management for 1-2 years after planting depending on their age when planting out.

\* Note these definitions will vary depending on your regional or national classifications.

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