Eastern and Southern Africa
Regional Strategy
2015 - 2024
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<th>Description</th>
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<tbody>
<tr>
<td>ACT</td>
<td>African Conservation Tillage Network</td>
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<tr>
<td>AFF</td>
<td>African Forestry Forum</td>
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<td>AFRENA</td>
<td>Agroforestry Research Networks for Africa</td>
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<td>AGRA</td>
<td>Alliance for a Green Revolution in Africa</td>
</tr>
<tr>
<td>ANAFE</td>
<td>Africa Network for Agriculture, agroforestry and Natural Resources Education</td>
</tr>
<tr>
<td>ASARECA</td>
<td>Association for strengthening Agricultural Research in East and Central Africa</td>
</tr>
<tr>
<td>AUC</td>
<td>African Union Commission</td>
</tr>
<tr>
<td>CAFNET</td>
<td>Coffee Agroforestry Network</td>
</tr>
<tr>
<td>CBO</td>
<td>Community-Based Organization</td>
</tr>
<tr>
<td>CCARDESA</td>
<td>Centre for Coordination of Agricultural Research and Development for Southern Africa</td>
</tr>
<tr>
<td>CGIAR</td>
<td>Consultative Group on International Agriculture Research</td>
</tr>
<tr>
<td>CIDA</td>
<td>Canadian International Development Agency</td>
</tr>
<tr>
<td>COMESA</td>
<td>Common Market for East and Southern Africa</td>
</tr>
<tr>
<td>CRP</td>
<td>CGIAR Research Programme</td>
</tr>
<tr>
<td>EAC</td>
<td>East African Community</td>
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<tr>
<td>EIAR</td>
<td>Ethiopian Institute for Agricultural Research</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization (UN)</td>
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<tr>
<td>ESAf</td>
<td>Eastern and Southern Africa</td>
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<tr>
<td>ICRAF</td>
<td>International Centre for Research in Agroforestry (World Agroforestry Centre)</td>
</tr>
<tr>
<td>IGAD</td>
<td>Inter-Governmental Authority for Development</td>
</tr>
<tr>
<td>IRST</td>
<td>Institute of Scientific and Technological Research</td>
</tr>
<tr>
<td>KALRO</td>
<td>Kenya Agricultural and Livestock Research Organization</td>
</tr>
<tr>
<td>KEFRI</td>
<td>Kenya Forestry Research Institute</td>
</tr>
<tr>
<td>NARIS</td>
<td>National Agricultural Research Institutes</td>
</tr>
<tr>
<td>NARO</td>
<td>National Agricultural Research Organization</td>
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<tr>
<td>NEPAD</td>
<td>New Partnership for Africa's Development</td>
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<tr>
<td>NASCO</td>
<td>National Agroforestry Steering Committee</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>SADC</td>
<td>Southern Africa Development Cooperation</td>
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<tr>
<td>SDG</td>
<td>Sustainable Development Goals</td>
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<tr>
<td>SRF</td>
<td>Strategic Results Framework</td>
</tr>
<tr>
<td>TARO</td>
<td>Tanzania Agricultural Research Organization</td>
</tr>
</tbody>
</table>
1.1 Introduction

The Eastern and Southern Africa (ESAf) region of the World Agroforestry Centre (ICRAF) has the primary role of implementing agroforestry research and development in the countries as shown in Table 1. We work with multiple partners including national agricultural and forestry research institutions. The social, economic and human development parameters presented in the table clearly imply that food and nutritional insecurity, low income and poor environmental management are common problems in these countries.
Despite the low level of urbanization, rural-to-urban migration is rising quite fast, resulting in annual urban growth rates of 5-6 percent. Gross Domestic Product (GDP) per capita is low in all the countries, even when corrected for purchasing power.

### Table 1: General statistics for some of the countries where ICRAF operates in ESAf

<table>
<thead>
<tr>
<th>Country</th>
<th>2010 Population (Millions)</th>
<th>Urbanization, 2012: % of total population</th>
<th>GDP in 2013 per capita (USD) WB</th>
<th>GFSI rating 2014*</th>
<th>Land area under forest cover (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Burundi</td>
<td>8.5</td>
<td>14</td>
<td>267</td>
<td>26.3</td>
<td>4.5</td>
</tr>
<tr>
<td>2. Ethiopia</td>
<td>83.5</td>
<td>17</td>
<td>498</td>
<td>35.8</td>
<td>12</td>
</tr>
<tr>
<td>3. Kenya</td>
<td>40.9</td>
<td>25</td>
<td>994</td>
<td>40.1</td>
<td>6.1</td>
</tr>
<tr>
<td>4. Malawi</td>
<td>13.9</td>
<td>16</td>
<td>226</td>
<td>33.0</td>
<td>33.6</td>
</tr>
<tr>
<td>5. Mozambique</td>
<td>22.4</td>
<td>32</td>
<td>593</td>
<td>31.0</td>
<td>49.1</td>
</tr>
<tr>
<td>6. Rwanda</td>
<td>10.4</td>
<td>27</td>
<td>633</td>
<td>34.2</td>
<td>18.4</td>
</tr>
<tr>
<td>7. Somalia</td>
<td>9.4</td>
<td>43</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>8. Sudan***</td>
<td>42.3</td>
<td>33</td>
<td>(S.Sudan) 1221</td>
<td>32.7</td>
<td>23.1</td>
</tr>
<tr>
<td>9. Tanzania</td>
<td>43.2</td>
<td>30</td>
<td>695</td>
<td>29.9</td>
<td>36.8</td>
</tr>
<tr>
<td>10. Uganda</td>
<td>31.8</td>
<td>15</td>
<td>572</td>
<td>45.6</td>
<td>14.1</td>
</tr>
<tr>
<td>11. Zambia</td>
<td>13.3</td>
<td>40</td>
<td>1540</td>
<td>32.6</td>
<td>66.1</td>
</tr>
<tr>
<td>12. Zimbabwe</td>
<td>12.6</td>
<td>33</td>
<td>905</td>
<td>N/A</td>
<td>38.7</td>
</tr>
</tbody>
</table>

* GFSI is Global Food Security Index. Maximum is 100, minimum is zero.
** Forest area is land under natural or planted stands of trees of at least five meters in height, whether productive or not, and excludes tree stands in agricultural production systems (for example, in fruit plantations and agroforestry systems) and trees in urban parks and gardens.
*** Figures include South Sudan (SS = South Sudan only)

Data Sources: Compiled from various World Bank and United Nations Statistics publicly available.

Agricultural productivity in the region is the lowest in the world with yields of the main cereal crops (maize, rice, sorghum and millet) stagnated at less than 25 percent of potentially attainable yields while the per capita food production has continued to decrease over the last five decades. Yield of grain legumes (beans and pulses) have also stagnated at about 0.7 ton/ha against a potential of up to 3 tons/ha. The low yields are largely attributable to land degradation and low use of organic and mineral nutrient resources, which has also resulted in negative nutrient balances. Lack of alternative sources of energy and opening up of more land to agriculture (considered inappropriate) have also led to massive
environmental degradation.

The value of agroforestry is seen through its contribution to livelihoods by providing both tree products and tree services. Generating these resources on farm and in grazing lands removes the pressure to extract them from forests. It can also serves as a strategy for ex situ conservation of threatened plant species.

However, for agroforestry to deliver these benefits to rural livelihoods and landscapes, research that generates knowledge on the options available to farming communities is needed. Current research activities in the region broadly include:

- Cross sectoral policy analyses to identify strategies for supporting agroforestry development
- Soil fertility improvements and whole landscape approaches to natural resource management
- Selection and testing of tree species and provenances suitable for farmers for the different ecological conditions and farming systems
- Spatial arrangement of trees in the landscape to optimize productivity of food, fuel, fodder and fibre and also generate ecological services
- Tools and methods for effective dissemination of proven agroforestry technologies, including human and institutional capacity development and impact assessment
- Gender and youth in agroforestry
- Climate change impact and mitigation/adaptation strategies

ESAf’s regional research and development programme is aligned primarily with ICRAF’s six Science Domains and ultimately with the CGIAR’s CRPs. The region has scientists who serve as focal points for each of ICRAF’s Science Domains and the CRPs.

The regional office is led by a regional coordinator who is supported by both scientific and administrative staff and is based at ICRAF headquarters in Nairobi. Corporate service support units for finance, administration, human resource management and communication are established at the regional headquarters.

Currently, ESAf has country offices in Ethiopia, Kenya, Rwanda, Tanzania, Uganda and Malawi. Country offices are led by country representatives. These are usually scientists who lead teams of researchers and administrative staff. The Malawi country office also serves as a nodal office for the southern Africa sub-region and has sub-offices in Lusaka, Zambia and Harare, Zimbabwe. Each country is in the process of developing its own agroforestry strategy which takes into consideration the local needs and also aspects of cross-country collaboration and aligning them with ICRAF and ESAf regional strategies.

An ecosystem service perspective was used to describe the various benefits from trees in De Leeuw et al., 2013. “Treesilience, an assessment of the resilience provided by trees in the drylands of Eastern Africa”. ICRAF, Nairobi.
1.2 Poverty, Food and Nutritional Insecurity

Figure 1 further illustrates the threats of food insecurity to the ESAf region. Although most countries have witnessed strong economic growth, reduced inflation rates and diminishing budget and trade deficits, the distribution of income is still skewed to favour cities and those already earning high incomes. The rural poor remain far behind, largely due to poor infrastructure and weak markets for their products. A large number of people continue to live on less than $1.25 per day.

In the ESAf region the per capita fruit and vegetable consumption falls far below the World Health Organization (WHO) recommended minimum of 146 kgs of fruit and vegetable per year, as demonstrated in the data from eight countries in Figure 2. Using agroforestry to raise fruit production is likely to raise local consumption. This is critical for raising nutritional security.
Agroforestry is the amalgamation of agriculture and forestry dealing with the inclusion of trees in farming systems and their management in rural landscapes to enhance productivity, profitability, diversity and ecosystem sustainability. It is technically defined as a dynamic, ecologically based, natural resource management system that, through integration of trees on farms, in grazing lands and other land uses, diversifies and sustains production. Agroforestry is a robust strategy and a powerful vehicle for achieving the goals of the three UN conventions on Conservation of Biological Diversity (CBD), UN Framework Convention on Climate change (UNFCCC) and UN Convention to Combat Desertification (UNCCD). It also responds directly to 5 of the 17 Sustainable Development Goals (SDG).

The International Centre for Research in Agroforestry (ICRAF) also known by its brand name, World Agroforestry Centre, has a global mandate to lead development of robust agroforestry innovations that can bring improvement to food and nutritional security, incomes of smallholder farming families and sustain productivity of landscapes. Successful adoption and practise of agroforestry depends on favourable policies and environment. In addition to generating agroforestry science and innovations, ICRAF and its national partners conduct research on policies and institutional arrangements that can potentially enhance the uptake of agroforestry. This requires a good understanding of the attitudes and perceptions of farmers, local institutions and policy makers.

ICRAF implements its work through six regional programmes; two in Africa, three in Asia and one in Latin America. The regional programs implement ICRAF’s corporate strategic plan, which articulates the promotion of agroforestry for sustainable agriculture and natural resources management.

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Figure 2. Per Capita Fruit and Vegetable Consumption per Year for Some ESAf Countries (Kg).

Source: Extracted and adapted from http://www.theafrica.co.ke/news/Low+fruit+intake+killing+East+Africans++study+/-/2558/1264416/-/3mid9/-/index.html
1.4 Why a Regional Approach is needed

As pointed out in the introduction and the subsequent data describing some of the countries in the ESAf region, the country profiles are similar. It is more effective and efficient to federate efforts in the region so that our researchers can work at representative sample sites to produce results that can be shared across the countries. This also ensures effective use of existing capacity and reinforces collaborative arrangements. Additional advantages of this approach include:

- Joint capacity development
- Establishing links to regional economic policies and strategies (e.g. EAC, SADC, IGAD, COMESA)
- Enabling rapid germplasm transfers between countries
- Expanding markets and certification aspects
- Economies of scale
- Providing access to regional resources
- Enabling stronger partnership between national institutions, and
- Enabling sharing with and learning from other ICRAF regions with similar challenges

The regional programme shall also ensure synchrony and value addition to national programmes. Factors considered in the selection of countries to work in ESAf region emphasizes strategic as opposed to opportunistic engagement in each of the countries. Bearing in mind the statistics provided above the following factors were applied in selecting countries to work with and the mode of engagement:

- A high probability of agroforestry to make a positive contribution to food security, nutritional security, income and environmental sustainability
  - Geo-ecological and climate conditions
  - Existing/traditional tree farming practices
  - Past experience in agroforestry
- A responsive environment for agroforestry. This includes;
  - Favourable policy towards agroforestry
  - Availability of partner institutions to work with ICRAF
  - Human resources
- Good potential to secure funding support
This explains why in some countries we are targeting the scaling up of agroforestry technologies while in others we are working with national partners to create a favourable environment and capacity for agroforestry development, as elaborated in Box 1.

**Box 1. Current (2014) Stages of Agroforestry R&D in Different Countries in ESAf region**

| Countries where scaling up is top priority, especially incorporating agroforestry into development programmes: Ethiopia, Kenya, Malawi, Rwanda, Tanzania, Uganda and Zambia |
| Countries where more work is needed in policy, partner institutions and especially local capacity: Zimbabwe and Mozambique |
| Countries initiating agroforestry activities and utilizing experiences from within and outside the region: Burundi, Somalia, Botswana, South Africa and Lesotho |
| Countries which have expressed interest in agroforestry and are currently recipients of knowledge and capacity building support: Namibia, Angola, Swaziland and Madagascar |
1.6 Agro-ecological Zones of the ESAf Region

Figure 3: Agro-ecological zones
A very common framework for analysing agricultural landscapes is the famous agro-ecological zones. These are divisions of the landscape according to ecological conditions. While this is well appreciated, there are challenges on exactly how to apply it when dealing with shifts in weather across landscapes as currently experienced under climate change. It is certainly an interesting climate change research challenge to establish whether the seasonal changes are permanent or just transient. The regional agro-ecological zone map (Figure 3) shows the general classification of the region and the colours do in a way also imply differences in productivity. It is instructive also to be familiar with farming systems data, which show the major cropping systems.

Landscape relief influences crop/tree choices and systems of production. In developing agroforestry options, ESAf region will take into consideration agro-ecological conditions, social cultural settings and preferences, prioritization of local needs and the national agricultural and forestry investment plans. This approach should enhance the adoption rates for agroforestry.

1.7 Lessons Learnt from our past work in the ESAf region

The history of agroforestry in the region goes back to 1986 when Agroforestry Research networks for Africa (AFRENAS) were established. In the period 1986-2001 the AFRENAS (one for eastern, southern and western Africa) were the federating instruments for joint planning of agroforestry research and development.

While ICRAF served as the hub for coordinating the strategic plans developed then for each region, the responsibilities for implementation were for all partners, including national agricultural and forestry research institutions, universities, government and interested NGOs. Resource mobilization was then organized jointly with partners. A good example was the Canada (CIDA) supported project for focusing on specific agroforestry technologies in southern Africa. The following lists of benefits and challenges were generated from consultations with the region’s national partners during the process of developing this strategy.

The benefits of this model were seen as:

- Collaborative planning, awareness, implementation and communication
- Coherence of the plans and good synergy with national plans and strategies
- Excellent buying in by national partners
- Common standards and methodology for diagnosing agroforestry challenges and working out solutions
- Very strong capacity development efforts guided by identified needs
- The opportunity to test agroforestry innovations across several ecologies and social systems has been very useful
ICRAF’s partnership with national research systems as well as development organization adds value to the whole process of research as well as scaling up/out of research results

Partnership with universities was buoyed by ANAFE’s scholarship programme and curriculum development initiatives. The universities are now assisting in the production of new scientists with agroforestry qualifications

However, the following challenges emerged:

- National agroforestry plans were weak or non-existent, therefore mainstreaming of agroforestry into country programmes was slow
- There was a tendency to view agroforestry more as a set of technologies rather than a holistic landscape management system. Thus technology push was emphasized and that did not help in raising the profile of agroforestry especially where failures occurred as in the case of alley cropping
- The regional R&D projects then developed brought in resources, which were managed by ICRAF and this created tension with national partners concerning their stakes and power over resources

In the period from 2000-2014 transition took place (albeit at different pace for each country). There has been active push for countries to develop their own agroforestry policies, programmes and projects. The ICRAF projects and strategies then provide additional support for undertaking work that is beyond the individual country needs or capacity. The establishment of ICRAF country offices also gained momentum. This was a very good strategy but it also has its own pitfalls, such as:

- Difficulty to fully capture what was going on in the different countries
- Expensive to manage all the ICRAF country offices and the bureaucracies generated, also leading to withdrawals from some countries (Mozambique, Uganda, Zambia and Zimbabwe)
- A general weakening of the joint planning and implementation efforts within countries/between countries
- A drop in agroforestry capacity development and mobilization efforts

The good outcomes include inter alia:

- Development of national agroforestry strategies, plans and projects (e.g. in Kenya, Ethiopia, Malawi, Tanzania, Rwanda and Zambia)
- Inclusion of agroforestry in national agricultural and/or forestry development plans (e.g. Kenya’s policy on 10 percent tree cover on farms, Tanzania’s Kilimo Kwanza (primacy of agriculture), Rwanda’s National Agricultural
Development Strategy, Malawi is Agriculture Sector Wide approach (ASWAp) and new resources from national and donor sources came in to support country programmes.

The following general lessons were generated at a 2014 workshop of ICRAF scientists and partners to develop ESAf regional strategy:

- Top-down problem solving undermines development; those affected must be intimately involved in choosing and developing solutions, therefore participatory approaches should be used to promote adoption of farm level agroforestry practices
- Inadequate gender integration in the past resulted in difficulty measuring the program’s gender impact
- Some successful innovations such as *Calliandra calothyrsus* as fodder crop for dairy cattle adopted in Kenya, Uganda and Rwanda; *Faidherbia albida* as a fertilizer tree widely adopted in Ethiopia, Malawi and Zambia; various fruit, medicinal plants, spices and condiments adopted in Ethiopia, Malawi, Uganda, Tanzania and Ethiopia and improved fallow technologies in southern Africa
- Despite the adoption indicated above, there is a need to refocus and broaden our research to include investigating barriers to adoption in some countries and also test the long-term sustenance. In many projects there were unrealistic assumptions concerning outcomes and impacts. There is a need for better understanding of complexities of achieving impact to avoid unrealistically optimistic expectations
- The complexity of agroforestry requires persistence, persuasion, political currency and shared interests to create conditions for the right transformation of farming traditions
- Single tree species promotion is not necessarily good in certain circumstances. A biodiverse portfolio of species may be advisable if we are to meet the diverse needs of farmers in addition to creating multifunctional landscapes. This strategy combines landscape with individual farm approaches in research and development of agroforestry
- The business aspects of agroforestry were inadequately addressed. This is emphasized in this strategy so that the element of profitability is fully brought out.
- Sound diagnosis of problems and assessment of potential solutions and accurate technical approaches to problem solving is essential. The more inclusive and participatory these processes are, the higher the likelihood of the program’s success
- Monitoring and evaluation must always be factored in project designs and in the budgets, and mechanisms for learning from experience to compliment the already existing knowledge base
Lastly, capacity development needs must be assessed and included in project design and solutions

Key aspects to include in the new strategy

- Partnership with national institutions and universities in research, capacity development (Includes working with ASARECA, CCARDESA, ANAFE, AFF, among others)
- Partnership with governments for policy/strategy development and frameworks for institutionalization of agroforestry (research and development)
- Follow up action with farmers to solve problems emanating from adoption of agroforestry innovations
- Business approaches to agroforestry tree products and services

This strategy presents ICRAF–ESAf regional program’s future direction in scaling up agroforestry science and innovations for regional development, the pathways that will get it there, the resources required, and the understanding of what the principal challenges are and how to tackle them. The strategic plan covers 10 years (2015–2024) and it was developed through a consultative and participatory process that included our partners.
2.1 Factors influencing ESAf Region’s strategy

This strategy responds to the demographic, environmental, economic, political and social trends elaborated below and the opportunities emerging there from. How the strategy translates into specific actions in each country and agro-ecological situations will depend on the specific conditions and previous experiences of our partners and our scientists.

2.1.1 Demographic factors

- Urbanization is growing as the rural youth move to cities in search of livelihood opportunities; and as small towns are growing fast to absorb the rising population.
- The average age of farmers is rising fast, threatening future productivity. The drudgery involved in farming is a disincentive for youth to choose agricultural careers. However, there are huge opportunities if the youth can be engaged in businesses relating to agroforestry.

2.1.2 Environmental factors

- Rising land and forest degradation is caused by expansion of agricultural land into forest areas and areas classified as unsuitable for agriculture. Highlands and semi-arid lands are particularly threatened. Uncontrolled
livestock grazing contributes immensely to land denudation.

- The eastern and southern Africa region is experiencing the impact of climate change, with intensity increasing as we move further south of the equator. Increasing frequency of extreme weather events especially droughts, floods and unpredictable rains are raising farming risks, are making farmers more vulnerable. Promoting agroforestry can alleviate the problem and has been endorsed by the African Union Commission under its *Climate Smart Agriculture* paper.

- In southern Africa, drylands cover a large proportion of the land area. In Botswana and South Africa for example, drylands cover 100 percent and 92 percent of the country respectively. Similarly, between 52 percent and 82 percent of Ethiopia, Kenya, Malawi, Mozambique, Zambia and Zimbabwe are classified as dryland with Zimbabwe having the largest total dryland area followed by Mozambique. In these countries, the drylands are home to between 52 percent and 100 percent of the population who are largely dependent on agriculture.

- Livelihoods in dryland areas are constrained by the limited moisture availability, erratic rainfall patterns, periodic droughts and land degradation. These environmental constraints coupled with widespread poverty preclude the optimum use of inputs such as inorganic fertilizers on rain-fed agriculture. Increasing population pressure, unsustainable land management and climate change related droughts all negatively impact on the livelihoods of farmers living on dry lands.

The combined effects of degradation and climate change create a huge threat to agro-biodiversity. Diversification and increased use of traditional drought/flood and disease resistant crops is vital. Agroforestry can play a big role in this.

### 2.1.3 Economic factors

The operating environment in each of the countries is dynamic. The GDP of these countries are on the rise but largely from the exploitation of natural resources. While fundamental for food security, agriculture is yet to raise its contribution to economic growth. At the continental level, NEPAD-AU drives the overarching Comprehensive Africa Agriculture Development Programme (CAADP). There are specific commitments relating to investment in agriculture (agreed as 10 percent of GDP and currently achieved by Ethiopia and Rwanda). Each of the countries in the ESAf Region countries has developed country compacts for the implementation of CAADP, but the depth of agroforestry coverage is highly variable. It is important to note that NEPAD-AU does emphasize sustainable agriculture and conservation of natural resources and recognizes agroforestry as a vehicle to achieve these. In its paper on *Climate Smart Agriculture*, the African Union uses specific examples and illustrations from agroforestry. This sets the stage for improvements in related policies as well as investment priorities to include agroforestry.
i. There is a commitment by all countries to apply the agreed CAADP rate of 10 percent of the national budgets to fund agriculture and forestry. This includes agroforestry.

ii. There is a growing demand to increase tree cover in all the countries. Agroforestry provides a wide range of options for achieving this.

Most countries in the ESAf region countries are experiencing economic growth of at least four percent, but income distribution between urban and rural communities and between social groups remains a problem. Tree products marketing can expand economic opportunities for the rural poor.

Electricity and petroleum-based energy products cannot be afforded by rural poor. Therefore they depend on harvesting wood from natural forests causing degradation and deforestation. Trees for firewood and charcoal can be grown on farms.

2.1.4 Political and social factors

- There is relative political stability and devolution of governance that is ongoing
- Improved democracy in most countries is leading to regional stability
- Cross- and in-country conflicts are declining, creating peaceful conditions for economic growth
- Inequity across gender and many social groups still remains in all ESAf countries. Agroforestry offers opportunities for enterprise diversification by various social groups

2.2 Vision

The vision for the region is a rural transformation in eastern and southern Africa as smallholder households increase their use of trees in agricultural landscapes to improve food security, nutrition, income, health, shelter, social cohesion, energy resources and environmental sustainability. This vision is achievable if agroforestry is embedded in national agricultural and NRM investment strategies and powered by practical agroforestry innovations that are built upon the already available traditional/local practices.

2.3 Mission

The region’s mission is to generate science-based knowledge about the diverse roles that trees play in agricultural landscapes in eastern and southern Africa, and to use its research to advance policies and practices, and their implementation that benefit the poor and the environment in the region. This mission is consistent with those of countries where we are working. By building synergies and enhancing the capacity of national partners the ESAf region will
leverage the growth and mobilization of human and institutional capacity to generate and apply agroforestry science for development.

2.4 Strategic Goals

We have three logically linked strategic goals:

- Substantive adoption of agroforestry innovations with visible impact in the ESAf region
- Improved income and livelihoods through agroforestry-based systems in the ESAf region
- Sustainably managed agricultural landscapes in the ESAf region

These goals are elaborated in the following way:

<table>
<thead>
<tr>
<th>Strategic Goal 1. Substantive adoption of agroforestry innovations with visible impact in the ESAf region</th>
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</thead>
<tbody>
<tr>
<td><strong>Performance Goals:</strong></td>
</tr>
<tr>
<td>1. Sectoral policies on agroforestry at national and local levels analysed and suggestions for improvement communicated to relevant stakeholders and authorities</td>
</tr>
<tr>
<td>2. Gaps in human and institutional capacity for agroforestry identified and strategic capacity development undertaken</td>
</tr>
<tr>
<td>3. Effective promotion of proven agroforestry innovations including quality assurance for germplasm</td>
</tr>
<tr>
<td>4. Effective communication and engagement with rural advisory services</td>
</tr>
</tbody>
</table>

| **Targets**                                                                                               |
| 1. Agroforestry incorporated in policies and development plans/projects of land use sectors |
| 2. Adequate national plans made and implemented to strengthen human and institutional capacity |
| 3. Agroforestry innovations targeted to fit specific social needs and ecological settings |
| 4. Communication products developed and shared with relevant and effective media |

<table>
<thead>
<tr>
<th>Near-term action (1-2 years)</th>
<th>Mid-term action (3-5 years)</th>
<th>Long-term action / Assessment (6-10 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sectoral policies analysed</td>
<td></td>
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<tr>
<td>2. Capacity gaps identified</td>
<td></td>
<td></td>
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<tr>
<td>3. AF innovation selection tools and targeting</td>
<td></td>
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<tr>
<td>4. Design of communication products and media</td>
<td>1. Policy advice provided</td>
<td></td>
</tr>
<tr>
<td>2. Capacity development and mobilization undertaken</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Adoption and adaption by farmers and entrepreneurs and solving second generation problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Multi-media communication launched</td>
<td>1. Capacity formulation and implementation</td>
<td></td>
</tr>
<tr>
<td>2. Capacity development and mobilization undertaken</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Scaling up at local and national levels and solving second generation problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Multi-media communication continues</td>
<td></td>
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</tr>
</tbody>
</table>
**Strategic Goal 2. Improve income and livelihoods through agroforestry in the ESAf region**

**Performance Goals:**
1. Strengthen and mobilize entrepreneurial capacity in agroforestry products and services for youth, women and their organizations
2. Effective agroforestry communication

**Targets**
- The ESAf region capacity development program and models have evidence of impact on the engagement of youth and women in agroforestry-related business as individuals and as groups/organizations.
- ESAf region’s agroforestry business enterprise models for products and services under different social and physical conditions used by public and private entrepreneurs.
- Cross-sector integration enhanced through improved communication, especially in local media and using local languages.

<table>
<thead>
<tr>
<th>Near-term action (1-2 years)</th>
<th>Mid-term action (3-5 years)</th>
<th>Long-term action / Assessment (6-10 years)</th>
</tr>
</thead>
</table>
| 1. Develop data infrastructure for indicators to track progress of CD program  
2. Share learning and expand best practices among ICRAF SDs and regions on broadening participation of youth and women | 1. Pilot mechanisms for tracking progress in projects aimed at broadening participation of youth and women, and design impact study  
2. Identify best practices for expanding participation of youth and women | 1. Implement mechanisms for tracking progress in CD implemented by ESAf  
2. Implement longitudinal / impact studies  
3. Use findings from impact studies to expand participation of youth and women |

**Strategic Goal 3. Sustainably managed agricultural landscapes in the ESAf region**

**Performance Goals:**
1. Mapping and analysis of unsustainable landscape management practices
2. Analysis of production risks including climate change patterns and impact
3. Agroforestry mitigation and adaptation solutions developed and shared
4. Impact assessment on social, economic and ecological services
5. Mechanisms for integrated landscape management
Strategic Goal 3. Sustainably managed agricultural landscapes in the ESAf region

**Targets**
1. Unsustainable land management practices identified and solutions worked out across sectors
2. Climate change patterns, risks and impact mapped/quantified
3. Responsive agroforestry innovations developed and tested
4. Improved capacity to mitigate and adapt to farming and climate change risks
5. National multi-sectoral platforms for holistic landscape management

<table>
<thead>
<tr>
<th>Near-term action (1-2 years)</th>
<th>Mid-term action (3-5 years)</th>
<th>Long-term action / Assessment (6-10 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Surveys on unsustainable land management</td>
<td>1. Applying tools for stemming degradation and promoting regeneration</td>
<td>1. Applying tools for stemming degradation and promoting regeneration and impact assessment</td>
</tr>
<tr>
<td>2. Climate change data acquisition for different farming systems and ecologies</td>
<td>2. Applying agroforestry innovations for CC mitigation and adaptation</td>
<td>2. Continue AF innovations and evaluate impact</td>
</tr>
<tr>
<td>3. Convene cross-sectoral forums to establish collaborative arrangements</td>
<td>3. Facilitate the establishment of national platforms</td>
<td>3. Support, monitor and evaluate effectiveness of platforms on landscape management</td>
</tr>
</tbody>
</table>

2.5 Relevance to CAADP

The impact of ESAf region’s research and development contributes directly to the four CAADP pillars as illustrated in Table 2.

<table>
<thead>
<tr>
<th>CAADP Pillar</th>
<th>How ESAf regional strategy will contribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Land and water management</td>
<td>Providing technical solutions to land degradation, land regeneration and strategies for whole landscape and water management</td>
</tr>
<tr>
<td>2. Rural infrastructure and trade-related capacities for improved market access</td>
<td>Promoting business in tree-based products; especially building the capacity of youth and women in this area</td>
</tr>
<tr>
<td>3. Increasing food supply and reducing hunger</td>
<td>Developing and promoting trees and shrubs that produce fruit, nuts and fodder for livestock while also restoring soil fertility for food crop production</td>
</tr>
<tr>
<td>4. Agricultural research, technology dissemination and adoption</td>
<td>Building the human and institutional capacity for agroforestry research and development. Providing options for effective rural advisory services</td>
</tr>
</tbody>
</table>
Further, this strategy conforms and contributes to African Union’s Malabo Declaration of June 2014 on ‘Accelerated agricultural growth and transformation for shared prosperity and improved livelihoods’. Agroforestry contributes particularly to the following African Union goals: III-Ending hunger by 2025; IV-Halving poverty by 2025; and VI-Enhancing resilience of livelihoods and production systems to climate change.

2.6 Building on our past work

Our priorities are hinged on the results we have produced and lessons we have learnt from the past as explained above. In addition, we also consider the global trends, CGIAR transformations and fitting in with ICRAF’s 2013-2022 corporate strategy. Further, we seek to consolidate the strengths of our partners and mobilize their capacity to deliver.

We have observed that in many countries, agroforestry is gradually being recognized. It is therefore imperative that our efforts and those of our national partners, NGOs and development partners converge to deliver prime results. The region will therefore focus on three strategic priorities.

2.6.1 Relevant research to backstop agroforestry adoption

ICRAF understands the key needs of the ESAf region and the technologies that have the potential to create impact and get adopted having worked in the region for more than 30 years. However, the Centre has pushed single technologies separately and has not paid enough attention to the need to backstop farmers on challenges they face in achieving impact. Business-oriented tree farming is growing fast in ESAf countries and this must be boosted through research that is guided by context/relevance.

Four important key areas:

- Supporting quality germplasm supply systems especially targeting trees for fruits, energy and fodder. Energy is needed for cooking food therefore it is closely linked to food and nutrition security, in addition to environmental security
- Diversifying and supporting on-farm tree management, including product processing and marketing
- Making effective demonstration of agroforestry systems, including dissemination of science-based evidence at both farm and landscape scale
- Ecological services and especially water management are crucial elements to be researched especially as they are influenced by climate change
2.6.2 Strengthening and mobilizing partner capacity, including joint planning

Over the years, partner capacity has grown considerably and there is now a need to recognize it, mobilize it and also work with them to strengthen quality of science. Creative models for partnering are needed to ensure better synergy of our efforts and cross-country learning. Joint research, publications and collaborative dissemination of agroforestry should become our modus operandi. We envisage four key areas of emphasis:

- Better engagement of youth and women especially in agroforestry-related business as individuals and as organizations
- Improvement of cross-sector analyses and collaboration
- Improvement of communication, especially in local media and local languages
- Developing agroforestry business enterprise models for products and services under different social and physical conditions including engaging in public-private partnerships

2.6.3 Agroforestry policy development and institutionalization

There is need for partnership at international and national level to ensure that supportive policies are made to tie in with opportunities identified in agroforestry. As ICRAF works on international arrangements to boost the profile of agroforestry, ESAf region will do similar and complementing work at regional level (e.g. EAC, SADC, IGAD), national and institutional levels, including NGOs. Two main functions are envisaged:

- Mainstreaming of agroforestry principles and practices into national development plans, strategies and projects
- Facilitating the establishment of functional regional and country agroforestry networks

Our work in eastern and southern Africa covers 12 countries and we collaborate with other CGIAR centres present in the region: CIFOR, Bioversity, CIMMYT, ICRISAT, ILRI, IWMI, CIAT, IITA and ICARDA on areas of common interest.
2.7 Linking Action to Impact

![Figure 4. How we can reach the desired goals]

2.8 Focal landscapes and farming systems of the ESAf Region

In this strategy, the primary level of defining the landscapes where we work is by aridity index, followed by elevation and where possible a third level being farming system. The aridity index is defined as the ratio of precipitation to potential evapotranspiration (P/PET). The advantage of aridity index and elevation are that they are reproducible across countries.

Under the first level (aridity index) we have humid, moist sub-humid, dry sub-humid and semi-arid zones. Under the second level (elevation) we have highlands (+1500m), mid-altitude (1000-1500m), lowland (below 1000m) and coastal while under the third level (farming system) we have crops, livestock and mixed (crops-livestock).

Agroforestry is essentially incorporated into existing farming systems, so it is important to consider our approaches for the different ecological conditions and farming systems. Our work will focus on farming systems linked to the following landscape categories:

**Humid highlands zone**

These are areas with an aridity index above 0.65\(^3\) and altitude of 1500 meters above sea level and length of growing period (LGP) more than 270 days per year. These hotspots for biodiversity, covers much of Ethiopia, Central Kenya, Rwanda, Burundi and Northern Tanzania, eastern Zimbabwe and west-central Mozambique.

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\(^3\) The aridity index is used for agro climatic zoning. It is the ratio of mean annual rainfall over mean annual potential evapotranspiration.
There are some small highland areas in the remaining countries of ESAf region. In these areas the population density is high (up to 230 persons per square kilometre in Rwanda and 120 p/km² on the slopes of Kilimanjaro in Tanzania). Farm holdings are quite small (down to half a hectare) but the cultivation intensity is high. The greatest challenges are soil acidity (low pH), erosion, landslides and water management (volume and quality as these are the water towers of the countries). Tree productivity in these landscapes is very high.

The target innovations include fodder shrubs for zero grazed livestock; trees (for fruits, spices, pharmaceutical products, fuel wood; stakes for climbing crops and poles/timber); fertilizer trees and agroforestry systems for erosion control. Shade coffee and tea plantations thrive in these areas. Special action is needed to support river systems in these landscapes. The ecosystem services produced in these areas are extremely important, so good management of forest margins is a priority.

Sub-humid zone (including the coastal lowlands)

The sub-humid zone can rise up to 1,500m above sea level and may extend in some countries into pockets of the highland massif. Rainfall range from 800–1300 mm and is relatively predictable. The LGP in this zone is 180-270 days per year. Native vegetation commonly consists of moist perennial savannahs and woodlands with overstories dominated by Brachystegia, Combretum and some Acacia spp. The common cereal crop is maize but other crops like cassava, sorghum, groundnuts and pigeon pea are commonly grown. Sedentary mixed crop livestock is the norm.

The sub-humid zone includes the wetter part of the coastal belt, which is a wide swath of land sometimes stretching to 300km inland and rising up to 500m above sea level. It covers Kenya, Tanzania and Mozambique. Here we find
highly productive river deltas (rice, mango, coconut, cassava and pineapple cultivation) and mangrove forests.

These areas are greatly affected by climate change especially when droughts or floods occur. They are greatly influenced by the ocean currents and generally the rainfall is up to 1000mm per annum. The proximity of seaports is an advantage for the production of export products. Farm holdings are relatively large (up to five hectares). Agroforestry research in these areas may include woodlots for poles, timber and energy; fruit and nut trees (e.g. cocoa, cashew, mango, guava, Allanblackia); fertilizer trees and silvi-pastoral systems.

**Semi-arid zone (including the Miombo woodlands)**

These are areas with an aridity index between 0.2 and 0.5. Usually between sea level and 1500m above sea level and receiving 400–1,000mm rainfall with some areas being unimodal and others bimodal. The LGP range from 70–180 days per year. Plant communities consist of perennial savannas and dry woodlands with grasses. Overstories are typically dominated by *Acacia spp*, *Commiphora*, *Combretum* and *Brachystegia*. Agro-pastoralism is common and maize is an important staple.

The expansive miombo woodlands fall under this zone. The eastern Miombo woodlands cover Mozambique and Tanzania while Southern Miombo woodlands cover Malawi, Mozambique, southern Zambia and Zimbabwe. Some areas of woodland are also found in Burundi. The rainfall is usually between 400mm and 1000mm per year, so depending on the rainfall volume, the woodland density
varies. While these areas are supposed to be covered by ‘dry forests’, in reality this is the major cereal-producing ecosystem in the ESAf region.

The cultivation of maize is dominant but we also find many other crops especially millet, sorghum, pigeon peas, sunflower, root and tubers (potatoes, yams, cassava). Deforestation and land degradation is dominant in these areas as they have experienced slash-and-burn agriculture for decades. A wide range of agroforestry innovations fit well in this system: improved fallows, fertilizer trees, agro-pastoral (e.g. ngiti<sup>4</sup> livestock systems in western Tanzania) among others.

Note: While focusing on solutions suitable for the three systems elaborated above, the ESAf region will be targeting the farming systems in place, namely maize-based systems, agropastoral systems, highland perennial systems and highland mixed systems. Within these ecosystems and landscapes, the region will also consider on-going work in the different CRPs and exploit possible synergies.

The highland areas and drylands are especially threatened by climate change. The impending degradation and deforestation and biodiversity losses could be colossal unless regenerative measures are undertaken soon.

Water is a critical element in production. So water harvesting and management will be our key strategy.

### 2.9 Links with ICRAF Science Domains and CRPs

The ICRAF’s Science Domains (SDs) have three roles in the region. First, they provide advanced scientific tools and results and work with our researchers to select most relevant approaches for the region/landscape. Secondly, SDs will support the region in generating robust research by making inputs into project proposals and backstopping implementation.

Thirdly, SDs will assist in the synthesis of our work to enable cross-regional comparison, learning and publication. These tasks are complementary to the region's research and development agenda. The region provides data to cross-regional research efforts, thereby enabling thematic global syntheses. Foresight studies, which include population/demographic changes (especially, urbanization), infrastructure development, middle-class growth, climate change, ICT/literacy, globalization, markets, land grabs, tenure changes and governance will guide the regional and country strategies which will then guide the portfolios of projects/flagships.

The theory of change/outcome mapping exercises will be done for each of the projects/flagships, and the matrix will be used to link these outcomes to ICRAF global strategy through SDs/CRPs. For example, one flagship can have a priority SD/CRP, but to achieve its outcomes, multiple SDs/CRPs should be identified to

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<sup>4</sup> Ngiti is a traditional system of managing pastures among the Sukuma people of Shinyanga, Tanzania, that ensures the availability and fair sharing of forage during the dry seasons.
feed into the delivery of outcomes (previously, mapping was done based on the delivery of outputs but not much on outcomes).

Additionally, the ESAf region will work intensively with each Science Domain to inter alia:

- Undertake accurate diagnosis of the problems of farmers and the environment
- Define the social and economic parameters influencing change
- Test suitable options in a participatory manner with stakeholders
- Strengthen and mobilize local capacity to implement the solutions
- Support product management including value addition and market development
- Follow up on second-generation problems and also local adaptation of agroforestry options

### 2.10 Understanding Adoption

ESAf region is aware of the challenges and risks involved in the adoption of single species or technologies. Thus bundling of innovations where appropriate will be emphasized with the objective of creating biodiverse environments. In our understanding of adoption we have three levels:

- Adoption of scientific methods and tools by partner research institutions including universities (examples include tree domestication tools, spatial analysis of landscapes, spectral analysis of soils and plants, dendrochronology, ecological service reward models)
- Adoption of policies and institutional frameworks and policies that enable investment in agroforestry
- Adoption of innovations that increase productivity, profitability and sustainability by farming communities at scale (examples are fodder crops, Ngitili, improved fallows, fertilizer trees, Farmer managed natural regeneration, community organization for natural resource management).

Spatial analyses will be undertaken to enable assessment of large-scale impact of agroforestry.

### 2.11 Partnership, Capacity and Communication

Partnering is a key to expanded delivery of agroforestry. Through the Partnerships & Impact Directorate at ESAf will forge stronger collaborative arrangements, where the national partners and farmer organizations will play stronger and increasing roles in the delivery of agroforestry. In this context, building partner capacity is crucial.
Sustenance of our work is accomplished by inclusion of the work in partner institutional plans and work programmes. ESAf region will also work with the Capacity Development Unit (CDU) of ICRAF to diagnose the capacity development and mobilization needs and develop effective programmes for bridging identified gaps.

Promoting equal access for both men and women to planning, decision-making and benefits is crucial for accelerating change that is sustainable. Advice on how best to integrate and mainstream gender and youth will be sought from subject matter experts (inside and outside ICRAF) at the formulation stage of projects. The region will develop a database of agroforestry educators, researchers and practitioners (including tree germplasm suppliers) at both institutional and if possible individual levels. Specific financial commitments will be made in projects to cover these areas.

Another important area is strengthening communication of our research findings while intensifying the delivery of tailor-made knowledge products to serve our partners. In the past we have invested a lot in research but very weakly in communicating the findings. Greater participation in events like ‘Agriculture Shows’, ‘Farmers Days’ and exhibitions are useful.

Roadside demonstration plots will also be considered where appropriate. Use of local media is also crucial. Further, we will encourage the establishment of a repository of agroforestry knowledge in the region, as part of the creation of knowledge sharing platform.
3.1 Fitting into other relevant strategies

The ESAf strategy must be viewed in the context of other related strategies as elaborated in figure 5. The production and updating of country strategies will be done in very close collaboration with national partners and in such a way as to ensure their commitment to the implementation.

For example, local universities will be engaged especially through graduate research students to support the research efforts. Country strategies will be influenced by national policies while regional strategies will be influenced by changes in regional economic bodies such as EAC and SADC.

This strategy will be refreshed after the first five years of implementation, or if major policy orientations occur necessitating a revision.
3.2 CRP links and Cross Cutting Areas

The region will deliver CRP results through regional- and country-based projects that link with country agroforestry strategies. In keeping with the principles of Results based management, the region will start by defining the desired results at outcome level that will contribute to the delivery of the CRPs in synchrony with regional projects. The CGIAR cross-cutting areas, namely: partnerships, accountability, gender and foresight will apply in the implementation of this strategy as elaborated here under:

1. Partnerships

The mission of all collaborative efforts across ICRAF is to facilitate an effective and expanding network of stakeholder organizations working collaboratively to advance agroforestry science and practice.

The region will have three new priorities;

a) Foster partnerships that influence policies at the highest regional, national, and local levels (this includes partnering with AU, COMESA and other strategic regional bodies)
b) Partnerships that translate policies and drive change leading to observable and measurable impacts
c) Partnerships that extend and mobilize regional and country research and learning capacities. Universities will be closely engaged in this area
Our current partnerships are in the following categories: (1) CGIAR centres; (2) National agricultural research and extension institutions (NARES); (3) institutions of higher education; (4) farmer organizations (5) Non-Governmental Organizations and Community Based Organizations (NGOs & CBOs) and (6) private business sector. We will collaborate with other research and development bodies such as ACT, AGRA, ASARECA and CCARDESA - Centre for Coordination of Agricultural Research and Development for southern Africa. In the coming years we will engage more in task-based partnerships. We will institute periodic reviews, transparency, honoring commitments, mutual sharing of problems and successes and conscious attention to maintaining the autonomy and integrity of each organization. Accordingly, the partnership approach will be mainstreamed across all SDs and CRPs to deliver the strategic plan. The region will strengthen cost-sharing approaches at all scales.

2. Capacity development

The ESAf region recognizes that investment in capacity development will produce effective institutions that address the needs of targeted groups. The region will therefore take deliberate steps to research the skills need in partner institutions especially in the NARIs, universities and NGOs/CBOs, and strengthen them with support from the Capacity Development Unit of ICRAF.

Among other strategies, the region will consider training events, research fellowships, postdoctoral fellowships, sabbaticals and joint proposal development, establishing agroforestry networks and innovation platforms. This way, the region intends to actively engage scientists from NARIs and other development actors to be involved in joint R&D while remaining employed by their own institutions.

3. Gender

Gender analysis offers information to understand women’s and men’s role in farm enterprise planning and decision making, access to and control over resources that can be used to address disparities, challenge systemic inequalities (most often faced by women), and build efficient and equitable solutions.

Data gathered should be sex-disaggregated so that policies, programs and projects can build effective actions that promote equity. Since gender relations will change in each context and over time, a gender analysis will be done within each project taken by the ESAf region. To be more effective, gender analysis will be made part of each step of ESAf’s development initiative: from conception and design to implementation and evaluation.

In the integration of gender into research projects and programs, for instance, the ESAf region will systematically determine the major agroforestry activities
of men and women, with reference to field crops, farm forestry, processing, marketing, storage and income-generating activities. It will also strive to identify constraints and barriers faced by youth, men and women in carrying out their activities and ascertain the extent to which available technologies and agroforestry research responds to the needs of each category. Further, our research will identify the technical, logistical, and attitudinal constraints facing youth, men and women entrepreneurs.

4. Foresight

Countries in the ESAf region are connected by regional bodies such as IGAD, EAC, COMESA and SADC. These regional economic and political bodies influence policies and development programmes. Furthermore, there are various UN bodies such as FAO, UNEP and UNIDO whose policies and actions influence country programmes. There are also global institutions such as IMF and the World Bank working side by side with donors in supporting development initiatives.

The private sector investments are increasing in this region. By combining the local needs with foreign investment strategies and utilizing the emerging studies and surveys, ESAf region will continuously review the effectiveness of its country and regional strategies and actions.

Ultimately, what is needed is a good foresight on the future of smallholders in the region. We hope to do this by 2019 as we refresh this strategy. Foresight activities will be done in a collective and participatory process.
3.3 Risk Management

There are external and internal risk factors that if not carefully managed can impede the successful accomplishment of the region's strategic goals. Such risks emanate from changing demographics that pose environmental challenges, developments in the general economy, shifting priorities in national government policies, natural disasters, poor planning and management. Failure to strategically manage the region's risks can compromise its financial viability. In particular, the region is likely to be confronted with internal risks like achieving project results at the expense of strategic results, fraud (financial and scientific plagiarism, altering data) and human resource (high staff turnover rates).

The region will incorporate risk management into its strategic plan by including it under appropriate planning goals and objectives, identifying appropriate tactics and metrics and assigning responsibility for the risk management objective to appropriate personnel. The region will develop and institutionalize a risk management framework to be implemented at the project and programme levels.

The framework should outline the risk management process, such as systematic identification of risks, selection and implementation of strategies for managing them, continuous monitoring and improvement of the risk management programme. The framework should provide guidance on the formation of risk management committee including roles and responsibilities of the committee. Standardized methods and tools for identifying risks such as SWOT analysis as well as metrics for assessing performance will be adapted and included in the risk management framework to allow for cross-country learning.

To mitigate any funding risks, a number of strategies will be pursued including:

- Enhanced pursuit of non-conventional avenues of fund raising and working with private sector organizations committed to corporate social responsibility
- Expansion of partnerships with regional development banks, especially the African Development Bank and the East African Development Bank
- Enhanced multi-year arrangement with donor partners in order to increase nonearmarked and soft-earmarked income. The system of joint annual consultations with like-minded donors will be strengthened
- Engagement in direct campaigns to persuade national governments in the region to invest in natural resources management research

3.4 Performance Measurement

Monitoring and Evaluation (M&E) are integral and individually distinct parts of programme preparation and implementation. They are critical tools for forward-looking strategic positioning, organizational learning and for sound management. Both monitoring and evaluation are meant to influence decision making including decision to improve, reorient or discontinue the evaluated intervention or policy;
decisions about wider organizational strategies or management structures, and decisions by national and international policy makers and funding agencies.

Monitoring and evaluation information will be used for organizational learning, by sharing lessons learnt internally and with stakeholders accordingly. Through mandatory biannual progress reports, monitoring and evaluation information will be used to hold the countries and ESAf region as a whole accountable by communicating the extent to which resources have been efficiently and effectively used to achieve planned results and to meeting international standards of excellence in monitoring and evaluation. In the coming years focus will be on improving capacity to contribute more systematically in tracking and reporting scientific and development results. To ensure effective and quality monitoring and evaluation, it is critical that the region sets aside adequate financial and human resources at the planning stage.

While monitoring at the programme and project level will focus on two important aspects, namely situation and performance monitoring, evaluation will emphasize on five main criteria; relevance, efficiency, effectiveness, impact and sustainability. The region in collaboration with the Monitoring, Evaluation and Impact Assessment Unit under the Partnership and Impact Directorate will develop and institutionalize a Monitoring, Evaluation and Learning (MEL) framework to be implemented at the project and programme level. Capacity building of the staff at all levels will be undertaken as a way of institutionalizing MEL at the project and programme levels.

### 3.5 Financial and human resources

Over the course of this strategic plan, the ESAf region intends to significantly increase its financial base and reversing the significant decline in staffing and funding that the program has experienced in the last few years. In the next 10 years of this broad plan, the region intends to build a critical mass of human capital in order to strengthen our scientific, technical, communication and administration capacity and improve operational efficiency.

We will also undertake aggressive resource mobilization to ensure that critical positions needed for effective operation are filled and critical studies are conducted. To achieve this, the region envisages a growth of its budgets by 7% per year of the overall budget for the next ten years. (Table 3) with a higher growth of the work package for window 1 and window 2 funding to achieve a reasonable level of core funding. This portfolio is necessary to enable the region invest in scaling up research and dialogue with national and regional processes (including private-public partnerships) that enable wider adoption of agroforestry innovations while undertaking critical research to address emerging issues.
Table 3: ESAf regional budget (USD 10^9) projects for 2015 till 2024

|------|------|------|------|------|------|------|------|------|------|------|

1. Note: Until 2013 eastern Africa and southern Africa were two separate regions. They were merged to form the eastern and southern africa region hence from 2015 onwards a unified budget forecast will be presented.

2. A large part of this growth is anticipated through increased engagement in the region’s research in development portfolio in a research-in-development co-learning paradigm.
The Eastern and Southern Africa Region Strategic Goals

**Strategic goal 1:** Substantive adoption of agroforestry innovations with visible impact in the ESAf region

**Strategic goal 2:** Improved income and livelihoods through agroforestry-based systems in the ESAf region

**Strategic goal 3:** Sustainably managed agricultural landscapes in the ESAf region