An Inventory of existing financing solutions for biodiversity conservation in Zambia

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Key Points & Recommendations

a) Between 2010 to 2017, donor funding financed 73% of Zambia’s national budget towards environmental protection. Government needs to take leadership in financing environmental protection given the dwindling Overseas Development Assistance (ODA).

b) Between 2010 to 2018, budgetary allocation towards environmental protection remained at an average of 0.6% of the total national budget against 2.29% allocated towards agriculture subsidies over the same period (Farmer Input Support Programme-FISP). Given the failure of FISP to deliver against its primary objectives of increasing productivity and poverty reduction over the years of its existence, it is recommended that this subsidy be reformed i.e. greening it.

c) Fiscal revenue that are derived from environmental or biodiversity fiscal measures must not be pooled in the consolidated account. Instead, they should have a separate account earmarked to fund environmental or biodiversity conservation projects only.

d) Non-tax revenues collected by Ministries, Provinces, and Spending Agencies (MPSAs) charged with biodiversity conservation must be allowed to retain a substantial component of the revenue collected (i.e. 60%) to be ploughed back into biodiversity conservation.

e) The minimum investment threshold of US$500,000 for investments to qualify for incentives under the Zambia Development Agency (ZDA) Act is too high. This needs to be revised downwards i.e. $50,000 if the country is to attract investments for pro-biodiversity conservation investments.

f) Key biodiversity sectors notably fisheries, wildlife and water ought to explicitly be designated as priority sectors in the ZDA Act for potential investments in such sectors to qualify for fiscal incentives. The specific qualifying areas of investment outlined in the second schedule of Statutory Instrument No.17 of 2014-ZDA Act also needs to be revised to include these pro-biodiversity conservation investment areas.

g) There has been a concentration on regulatory, fiscal, debt and grant instruments to finance biodiversity conservation in Zambia. It is essential to begin focussing on innovative financing instruments notably those that are market oriented (offsets, carbon markets, green or social and development Impact Bonds, impact investments etc), supported by risk mitigation instruments such a sovereign/public guarantees as well as disaster risk and related insurance products.

1.0 Introduction

Globally, there is a huge financing gap for biodiversity conservation. The annual financing needs are estimated to be between US$150 and US$440 billion but only US$52 billion is spent on biodiversity conservation per year (UNDP,2016:10). To bridge this finance gap, countries have devised or adopted various financing instruments and solutions aimed at funding biodiversity conservation strategies presently enshrined in the National Biodiversity Strategic Action Plans (NBSAPs). In view of the above, the Biodiversity Finance Initiative (BIOFIN) developed a methodology aimed at providing
national capacity towards a coherent and comprehensive national approach to biodiversity financing.

Given that Zambia will soon embarked on the development of the Biodiversity Finance Plan (BFP), this policy brief seeks to undertake an inventory of existing financing solutions whose output will provide “lessons learnt” in the development of Zambia’s BFP. BIOFIN defines finance solutions as “different ways of using one or more finance mechanism or instruments (e.g. taxes and subsidies) in a particular context (e.g. finance sources and agencies/institutions involved), targeting results that improve the sustainable management of biodiversity” (UNDP 2016:11).

2.0 Data and Methods

As a precursor to the development of the National Biodiversity Finance Plan, the BIOFIN methodology requires that countries undertake an analysis of existing and potential finance solutions to prioritize and optimize a final list of solutions for inclusion in the Finance Plan. The key findings and recommendations closely follow the BIOFIN methodology where financing instruments for biodiversity conservation (i.e. regulatory, market, fiscal, risk, equity/debt, and grants) are expected to achieve one or more of the following results: revenue generation, better delivery, realignment of existing expenditures, and/or reduction of future expenditures.

The study uses secondary data from Zambia’s legislative literature as well as reports from local and international think tanks.

3.0 Findings & Recommendations

3.1 Generating Revenue

3.1.1 Tax Revenue

Zambia’s national budget is largely financed by tax revenue, averaging 66 percent annually (Government of Zambia, 2017:99). In relation to the environment and biodiversity conservation, key taxes include excise duty on carbon and timber as well as mineral royalty tax. Whilst mineral royalty tax may not directly qualify as a biodiversity related tax, its inclusion in this discussion is in view of mining being cited as one of the drivers of biodiversity loss in Zambia. Mineral royalty tax and excise duty of carbon and timber generated a cumulative total of K15 Trillion (US$1.5 billion) between years 2010-2016

<table>
<thead>
<tr>
<th>Taxes</th>
<th>Total (ZMK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Royalty Tax</td>
<td>15,065,027,674</td>
</tr>
<tr>
<td>Excise Duty-Carbon</td>
<td>146,216,612</td>
</tr>
<tr>
<td>Excise Duty- Timber</td>
<td>18,993,121</td>
</tr>
<tr>
<td>Grand Total</td>
<td>15,230,237,407</td>
</tr>
</tbody>
</table>


Issue: Tax revenue that are derived from environmental or biodiversity fiscal measures such as carbon tax, excise duty on carbon and timber are deposited in the consolidated account at the Central Bank (Bank of Zambia) together with the rest of the other tax revenues towards financing of the national budget. Pooling of biodiversity revenues into the consolidated account is problematic because there is a possibility for such funds financing activities that are at variance with the cause for which they were collected. For example, pooling of carbon tax into a consolidated account raises the possibility of such funds financing fossil fuels or subsidies that may be harmful to biodiversity.

Recommendation: Fiscal revenue that are derived from environmental or biodiversity fiscal measures should have a separate account earmarked to fund environmental or biodiversity conservation projects only. Alternatively, tax revenue raised from environmental or biodiversity fiscal measures could be used to finance the National Biodiversity Conservation Fund which is proposed in later sections of this policy brief.

3.1.2 Non-Tax Revenues

Non-tax revenues are revenues collected by Ministries, Provinces, and Spending Agencies (MPSAs) which over the years have contributed an average of 9% of total domestic revenues (Government of Zambia, 2017:99). According to the Public Finance Act of 2004, general revenues includes ‘moneys accruing to the Republic of Zambia by way of taxes, licences, import fees, fines, levies and charges, sale of government property and shares, loans, donations and grants raised from within or outside Zambia or any other income due to the Republic’ (Government of Zambia, 2004:98). As can be noted in Table 2, non-tax revenues generated a cumulative amount of K399 million (US$ 39 million) between 2010-2016
Table 2: Non-Tax Revenues (2010-2016)

<table>
<thead>
<tr>
<th>Revenue sources</th>
<th>Total (ZMK)</th>
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<tbody>
<tr>
<td>Mining Licences</td>
<td>112,640,386</td>
</tr>
<tr>
<td>National parks and Trophy Hunting</td>
<td>112,362,746</td>
</tr>
<tr>
<td>ZEMA Collections</td>
<td>74,626,571</td>
</tr>
<tr>
<td>Forestry Revenue</td>
<td>60,993,748</td>
</tr>
<tr>
<td>Water Board Fees</td>
<td>25,423,603</td>
</tr>
<tr>
<td>Fish Licences</td>
<td>8,137,917</td>
</tr>
<tr>
<td>Import &amp; Export Permit- Fisheries</td>
<td>2,751,299</td>
</tr>
<tr>
<td>Import &amp; Export Permit- Agriculture</td>
<td>2,456,539</td>
</tr>
<tr>
<td>Proceeds from Sale of Fish</td>
<td>32,129</td>
</tr>
<tr>
<td>Grand Total</td>
<td>399,424,938</td>
</tr>
</tbody>
</table>


According to the Public Finance Act of 2004, section 13, all general revenues and other public moneys accruing to the Treasury are expected to be credited into a Consolidated Account at the Bank of Zambia (Government of Zambia, 2004) subject Appropriation-in-Aid guidelines.

**Issue:** The policy for the remittance of most of the biodiversity dependent revenues to the central repository at the Central Bank raises the possibility for spending such revenues on activities that are in essence drivers of biodiversity loss.

**Recommendation:** Consider allowing retention of at least 60% of the revenue generated by key biodiversity conservation departments and make regulatory amendments to have the balance to be credited into the National Biodiversity Conservation Fund which is proposed in later sections of this policy brief.

3.1.3 Fiscal incentives

The amended Zambia Development Agency (ZDA) Act No 17 of 2013, provides for investment thresholds that must be met for any potential investor to qualify for fiscal incentives. The thresholds are (i) the investment amount must not be less than Five Hundred Thousand United States Dollars (US$ 500,000) or the equivalent in convertible currency which is approximately K5,000,000 in local currency, (ii) the investment must be in a priority sector or product in a multi facility economic zone or an industrial park (ZDA 2017)

Prior to the 2018 National Budget Speech which was presented to Parliament on 29th September 2017, investors who satisfied the requirements as outlined above were entitled to the following fiscal incentives:

**Box 1: Fiscal Incentives for qualifying investments**

- **a)** Zero percent tax rate on dividends for five (5) years from year of first declaration of dividends.

- **b)** Zero percent tax on profits for 5 years from the first year of operation for manufacturing projects in a rural area, MFEZ and Industrial Park.

- **c)** Zero percent import duty rate on capital goods, machinery including specialized motor vehicles for five years (ZDA 2017). The above ZDA incentives had been introduced by the Government of Zambia to encourage investment in priority sectors as identified by the government.

In view of the above, three key issues emerge as outlined below;

**Issue:** In the 2018 budget pronouncements, the Minister proposed to discontinue the 5-year income tax holidays that were being facilitated through ZDA (Government of Zambia, 2018:34). In place of the tax holiday, it was proposed that investors be granted accelerated depreciation for capital expenditures by qualifying investments in priority sectors. Accelerated depreciation entails that there are greater deductions in the earlier years of the life of an asset which incidentally minimizes the taxable income.

However, PricewaterhouseCoopers (PwC) Zambia believes that the discontinuation of the 5-year income tax holidays and replacing that with accelerated depreciation is unlikely to attract additional investment in the priority sectors (PW, 2018:16). This is because investors that incur significant capital expenditure upfront will be unable to get full tax relief for the expenditure as the carry forward period for tax losses is restricted to five years (PWC, 2018:16).

**Recommendation:** Specifically, for pro-biodiversity conservation projects, the Zero percent tax on profits for five (5) years from the first year of operation for biodiversity conservation projects
need to be revisited. This is in view of the fact that whilst biodiversity conservation initiatives can generate revenues, most of them generally generate social as opposed to financial returns.

**Issue:** The minimum investment threshold of US$500,000 for an investment to qualify for incentives under the Zambia Development Agency (ZDA) Act is too high for pro-biodiversity conservation projects.

**Recommendation:** The minimum investment threshold of US$500,000 needs to be revised downwards if the country is to attract investments for pro-biodiversity conservation investments especially from domestic investors. This is in view of the cost of capital in Zambia which currently is as high as 30% across the banking sector.

**Issue:** The qualifying areas of investment which are outlined in the second schedule of Statutory Instrument No.17 of 2014-ZDA Act does not include key biodiversity conservation investment areas.

**Recommendation:** Key biodiversity sectors notably fisheries, wildlife and water, ought to explicitly be designated as priority sectors for investors in these sectors to qualify for fiscal incentives given their importance in the provision of ecosystem services, biological resources, and social benefits.

Further, the priority sectors which qualify for incentives listed in the second schedule of Statutory Instrument No.17 of 2014-ZDA Act and in the Seventh National Development Plan (7NDP) needs to be harmonised to avoid varying interpretations especially when administering fiscal incentives.

**3.1.4 Grants/Donor Aid**

Grants are another instrument used by Zambia to raise revenue to finance the national budget. These grants come in the form of general budget support, sector budget support or through project grants.

**Issue:** From 2010-2018, grants/donor funds have been earmarked to contribute the largest portion (73%) towards the financing of the budget function related to “Environmental Protection”.

**Recommendation:** Given the general decline in Overseas Development Assistance (ODA) in Zambia, grants are not expected to be on the increase hence the need for more reliance on other revenue generating avenues notably domestic revenue.

**3.1.5 Loans/Debt Instruments**

Loans have been one of the key financing instruments used by the Government to raise revenue to finance the national budget. Using provisions of Section 3 of the Loans Guarantee and Authorisation Act, the government does contract domestic and foreign loans using Government debt instruments such as treasury bills, government bonds as well as Eurobonds etc.

**Issue:** Zambia’s external debt stock had risen to 78.5% of GDP as at 2016 with a projection that the country’s debt-service-to-revenue ratio may breach its 20 percent threshold in 2022 and 2024 when Eurobond payments fall due (IMF 2017). The conclusion by IMF in October of 2017 was that Zambia has a substantial risk of debt distress hence this instrument may not be a likely finance solution for Zambia’s biodiversity at least in the near future.

**Recommendation:** The Government of Zambia should explore the feasibility of a debt for nature swap which was recently successfully arranged by Naturevestt for Seychelles. This is an instrument necessitated through debt restructuring agreements where governments can write off a proportion of their foreign held debt and instead direct payments into funds to support domestic conservation initiatives. (for more details, see BESNet, 2018).

**3.2 Realigning Expenditure**

The expected result from financing instruments aimed at “realigning current biodiversity” expenditure is that such instruments must re-orient existing financial flows towards the SDGs. Zambia recently removed consumption subsidies from electricity and fossil fuels in the quest to attain cost reflective tariffs to wo the private investments into the energy sector as well as to free resources for the national treasury. Given that biodiversity conservation resources are an appropriation from central government, the expectation from a biodiversity conservation perspective is that the realigned or freed resources would directly go towards biodiversity conservation which is not the case at present.
From 2010-2018, the average budgetary allocation towards “Environmental Protection” has been 0.56% of the total national budget. A review of other budget lines notably agriculture subsidies through the Farmer Input Support programme (FISP) shows an average budget allocation of 2.29% of the total national budget over nine years (2010-2018) with an outlier of 4.4% recorded in 2017.

Issue: As depicted in Figure 1, the expenditure on agriculture subsidies notably the Farmer Input Support Programme (FISP) has been more than six times the budgetary allocation towards environmental protection from 2010-2018.

Figure 1: Budgetary allocations to Environmental Protection vs Agriculture Subsidies (FISP)-2010-2018

Source: Computed by the researcher from ABB Budgets (2010-2018)

The bulk of redeemed farming inputs under the revised FISP (e-voucher) are synthetic fertilisers (60.7%) with insecticides and herbicides amounting to 2.6% (Kuteya et al, 2016:4). Strategic intervention #7.1 of the NBSAP-2 requires the country to move towards sustainable agriculture practices which partly entails limiting agriculture’s negative impacts on the environment such as the excess use of synthetic fertilisers, pesticides, and fungicides (Government of Zambia 2015). This is based on the rationale that excess use of synthetic fertilisers has the potential to alter the fertility of the soil by increasing the acid levels in the soil (CSEF 2017). Fertilizers also contains elements like nitrates and phosphates that can be flooded into lakes and oceans through rains and sewage. These substances prove to become toxic for the aquatic life, thereby, increasing the excessive growth of algae in the water bodies and decreasing the levels of oxygen.

It must be noted that despite the high costs of the agriculture subsidy programme (FISP) based on the budgetary allocations in comparison to environmental protection, the subsidy (FISP) has failed to deliver against its primary objectives of increasing productivity and poverty reduction over the years of its existence (Kuteya & Chapoto 2017; Mason & Tembo 2015). In the period of FISP’s existence, rural poverty has consistently remained high, declining only marginally from 78 to 76% since FISP was introduced in 2002 (Kuteya & Chapoto 2017) despite a cumulative budgetary allocation of K9.13 billion (US$913 million) between 2010-2018.

Recommendation: Given the failure of FISP to deliver against its primary objectives of increasing productivity and poverty reduction over the years of its existence, it is recommended that this expenditure be largely realigned and spent on environmental protection. Out of the 1.3% budgetary allocation towards environmental protection, only 0.4% is explicitly allocated for “Protection of Biodiversity and Landscapes” as depicted in Table 3 below.

Table 3: Detailed 2018 Budgetary Allocations for Environmental Protection Budget Function

<table>
<thead>
<tr>
<th>Budget Sub Functions</th>
<th>ZMK</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Environmental Protection</td>
<td>817,685,570</td>
<td>85.9%</td>
</tr>
<tr>
<td>Forestry Management and Protection</td>
<td>124,479,580</td>
<td>13.1%</td>
</tr>
<tr>
<td>R&amp;D Environmental Protection</td>
<td>5,468,170</td>
<td>0.6%</td>
</tr>
<tr>
<td>Protection of Biodiversity and Landscape</td>
<td>3,682,260</td>
<td>0.4%</td>
</tr>
<tr>
<td>Pollution Abatement</td>
<td>36,500</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>951,352,080</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Source: Computed by the researcher from ABB Budgets (2010-2018)

Recommendation: Modalities towards greening the current FISP must be developed. Options towards the greening of the agriculture subsidies include the following;

a) Scale back the level of subsidy and use part of the resources to support sustainable agriculture and biodiversity conservation projects;

b) Use the subsidy to promote conservation agriculture;

c) Give credits to farmers who purchase green fertilizers and other inputs; and

d) Consider Introducing a penalty for farmers using the subsidy to purchase inputs that do not promote biodiversity conservation.
e) Incentivise private sector to invest in organic farming inputs i.e. fertilisers, pesticides, fungicides etc.

3.3 Doing Better
The “delivering better” results theme under the BIOFIN initiative looks at “any measure or strategy that can contribute to save costs by delivering existing resources more efficiently and effectively.

Zambia to date has several public-sector driven biodiversity conservation funds that are largely a promulgation of the various Acts of Parliament as highlighted in Table 4.

Table 4: Public Sector Biodiversity Conservation Funds

<table>
<thead>
<tr>
<th>Name of the Fund</th>
<th>Legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment Fund</td>
<td>Environmental Management Act of 2011, Section 95</td>
</tr>
<tr>
<td>Fisheries and Aquaculture Development Fund</td>
<td>Fisheries Act of 2011, Section 53-56</td>
</tr>
<tr>
<td>Forest Development Fund</td>
<td>Forests Act of 2015, Section 70-73</td>
</tr>
<tr>
<td>Environmental Protection Fund</td>
<td>Mines and Minerals Development Act 2015, Section 86</td>
</tr>
<tr>
<td>Tourism Development Fund</td>
<td>Tourism and Hospitality Act 2015, Section 64</td>
</tr>
<tr>
<td>Water Development Trust Fund</td>
<td>Water Resource Management Act of 2011, Section 155</td>
</tr>
<tr>
<td>Wildlife Development Fund</td>
<td>Zambia Wildlife Act of 2015, Section 109</td>
</tr>
<tr>
<td>Wildlife Community Resources Board Fund</td>
<td>Zambia Wildlife Act of 2015, Section 35</td>
</tr>
</tbody>
</table>

Source: Compiled by the researcher from various Acts of Parliament

Biodiversity Conservation Funds are legal vehicles (trust) that supports biodiversity priorities by mobilizing, blending, and overseeing the allocation of financial assets towards biodiversity conservation (BESNet 2018).

Issue: Preliminary enquiries done on the status of the various sector specific biodiversity conservation funds outlined in Table 4 indicated that almost all the biodiversity conservation funds outlined in Table 3 were yet to be operationalised. The only public-sector fund that has been in operations for several years is the Environmental Protection Fund under the Ministry of Mines. On the private sector front, one notable successful biodiversity conservation fund is the Civil Society Environment Fund (CSEF) supported by the Ministry of Foreign Affairs of Finland. The aim of the fund is to “enhance the capacity of civil society to implement environmentally sound projects and to promote sustainable and equitable development in Zambia”. At the time of writing this policy brief, the CSEF was in its second phase of implementation having commenced on March 1st, 2015 and expected to conclude on February 28th, (CSEF 2017).

Recommendations: The Government of Zambia should consider consolidating the current non-operational sector specific biodiversity conservation funds into an independent private national biodiversity fund. The Practice standards for conservation trust funds (CTFs) developed by the Conservation Finance Alliance (CFA) guides that CTFs are best run as private, legally independent institutions that provide sustainable grant funding for biodiversity conservation (Conservation Finance Alliance, 2013). The standard further guides that CTFs are meant to raise and invest funds to make grants to non-governmental organizations (NGOs), community based organizations (CBOs) and governmental agencies (such as national protected areas agencies). Hence CTFs must be financing institutions rather than institutions that implement biodiversity conservation. Some of the notable existing biodiversity funds such as Madagascar Biodiversity Fund, Caribbean Biodiversity Fund (CBF), Japan Biodiversity Fund, and the recently constituted Uganda Biodiversity Funds are designed based on some of the principles outlined in the Practice standards for conservation trust funds.

In the quest to truly see any tangible progress on the various sector specific biodiversity conservation funds in Zambia, it is proposed that the Government may instead consolidate these various sector specific conservation funds into a national biodiversity conservation fund which must preferably be registered as a private legal entity. Having a national biodiversity fund would make it easier to pool financial resources, technical expertise as well as managing potential conflict of interest where implementing departments also run these funds. The existing sector specific funds can be treated as sub funds under the national biodiversity conservation fund.

As part of the resourcing of the proposed national biodiversity conservation fund, the toll fees
collected by the National Road Fund Agency (NRFA) should not just be earmarked for road construction and maintenance. Given the nexus between fossil fuel carbon emissions and road tolling, it is proposed that a percentage of toll fees collected by NRFA should be used to finance the National Biodiversity Conservation Fund which is proposed in later sections of this policy brief.

3.4 Avoiding Future Expenditure
In the quest to avoid future expenditures by resolving to redress some of the key drivers of biodiversity loss, the notable instruments used by the Government of Zambia are mainly regulatory i.e. fines and penalties. Each of the laws (Acts of Parliament) for key biodiversity sectors outlines various fines and penalties that are meant to act as deterrent measures.

Issue: Based on the findings in the Policy & Institutional Review (PIR economic development notably agriculture intensification and infrastructure development are among the greatest drivers of biodiversity loss in Zambia. The continued degazzation of forests which act as water aquifers may potentially increase expenditure in the future to adapt or mitigate climate change effects arising from such acts.

Recommendation: In the quest to avoid future expenditure i.e. water crisis arising from continued degazzation of forests and encroachment of water aquifers due to agriculture intensification, there is need to speed up the development of land use plans under Department of Physical plans so that biodiversity hotspots are mapped and declared as endangered areas for any form of developments.

4.0 Potential new finance solutions
Below are some proposed financing solutions for possible inclusion and review during the development of Zambia’s Biodiversity Finance Plan (BFP). It must be noted that the final BFP will be determined by stakeholders hence the finance solutions highlighted below are merely the author’s professional opinion.

The suitability of these proposed finance solutions for inclusion into Zambia’s BFP will however be dependent on their scores during the two-staged vetting process. The initial vetting process dubbed “rapid screening” will be used to screen the lengthy list of viable solutions in relation to their impact on biodiversity, the likelihood of success or record of positive implementation elsewhere and their projected financial impact. Solutions with higher scores will then be reviewed more thoroughly to be prioritized and chosen for the Finance Plan based on scores in relation to their social and economic impact, political will, buy-in among other stakeholders other than politicians, legal feasibility etc

4.1 Potential solutions to generate new revenue

- **a) Earmarking and retention of biodiversity dependent revenues (not pooling in the centralised account at central bank-Control 99).** This entails an increase in generation of own biodiversity dependent revenues among biodiversity conservation departments which should largely be retained at source i.e. forestry, wildlife, fish, National Biosafety Authority revenues. This could be achieved through sector specific pricing reforms backed by empirical studies.

- **b) Reforming or customising fiscal and non-fiscal incentives** to encourage investments in biodiversity conservation.

- **c) Introduce green treasury bills and bonds.**

- **d) Though ODA is dwindling, some efforts could still be made to attract more ODA whose proceeds could be pooled in the proposed national biodiversity conservation fund.**

- **e) Establish a project development fund to capacitate project developers and help in pre-feasibility studies given the huge data gaps for proof of concepts.**

- **f) Introducing green lending facilities in the banking and non-banking sectors.**

- **g) Lowering cost of capital for conservation investments.** Currently the weighted average cost of capital in Zambia is around 30% which is too high for pro-biodiversity conservation projects to operate sustainably.
4.2 Potential solutions to realign current expenditure

a) Reforming subsidies harmful to biodiversity. These could be replaced by i.e. greening of the Farmer Input Support Programme (FISP) using initiatives such as subsidies on organic agriculture inputs.

b) Enhance public budget execution notably lobbying for an increase in budget releases which currently averages 40%.

c) Develop regulations on corporate social responsibility expenditure towards biodiversity conservation.

d) Advocate for a percentage of road toll fees to be channelled to the proposed national biodiversity fund.

4.3 Potential solutions to deliver better

a) Set up a national biodiversity Conservation Fund (merge all existing sector specific biodiversity conservation funds which are non-operational).

b) Develop and implement a framework for biodiversity offsets.

c) Reviewing the effectiveness of current environmental fines and penalties.

d) Promotion of Impact investments.

e) Introduction of Sustainability standards and certifications.

4.4 Potential solutions to avoid future expenditure

a) Payment for ecosystem services (PES).

b) Mapping key biodiversity hotspots in the process of developing land use plans and declare them as no go areas for any form of non-green investments.

c) Develop derisking instruments i.e. disaster risk insurance, public/financial/private guarantees, Environmental risk insurance etc.

References


Kutya, A.N. & Chapoto, A., 2017. E-Voucher Performance and Recommendations for Nationwide Rollout during the 2017 / 18 Farming Season,


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