

# Development of a Baseline of Biodiversity Expenditure in Namibia

## Annexes: Expenditure Review

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## A Overall national budgetary and expenditure snapshot supporting data

**Table A1: Actual and forecast GDP and total government budget and expenditure data, 2005/06 – 2016/17**

Year	Nominal GDP (N\$ Billions)	Total Authorised Expenditure (N\$ Billions)	Total Actual Expenditure (N\$ Billions)	Expenditure as Percentage of GDP
2005/06	39.62	12.80	13.19	33.3
2006/07	48.23	15.29	15.28	31.7
2007/08	63.22	17.83	17.38	27.5
2008/09	74.58	21.28	21.95	29.4
2009/10	80.07	24.88	24.91	31.1
2010/11	83.57	27.74	27.55	33.0
2011/12	93.56	37.17	36.74	39.3
2012/13	110.79	40.07	40.07	36.2
2013/14*	116.44	47.58	-	40.9
2014/15*	141.31	60.20	-	42.6
2015/16*	160.17	64.09	-	40.0
2016/17*	182.04	69.48	-	38.2

\*Figures for these years are estimates and forecasts from the 2014/15 MTEF, so there is no actual expenditure data to report.

## B Total GRN expenditure supporting data

Table B1: Actual expenditure by Vote, 2012/13

Vote	Actual Expenditure (N\$ Millions)	Percentage of Total Expenditure
President	378.60	1.05
Prime Minister	231.80	0.64
National Assembly	107.00	0.30
Auditor General	80.30	0.22
Home Affairs and Immigration	231.70	0.64
Police	2,364.20	6.56
Foreign Affairs	542.80	1.51
Defence	3,414.30	9.47
Finance	2,996.50	8.31
Education	9,307.80	25.82
National Council	51.60	0.14
Gender Equality and Child Welfare	522.90	1.45
Health and Social Services	3,773.00	10.47
Labour and Social Welfare	1,239.60	3.44
Mines and Energy	178.80	0.50
Justice	444.10	1.23
Regional and Local Government, Housing and Rural Development	1,356.70	3.76
Environment and Tourism	518.10	1.44
Trade and Industry	717.80	1.99
Agriculture, Water and Forestry	1,575.80	4.37
Namibian Correctional Services	446.20	1.24
Fisheries and Marine Resources	235.60	0.65
Works	504.80	1.40
Transport	2,376.60	6.59
Lands and Resettlement	244.70	0.68
National Planning Commission	152.40	0.42
Youth, National Service, Sport and Culture	525.20	1.46
Electoral Commission	129.10	0.36
Information and Communication Technology	294.00	0.82
Anti-Corruption Commission	47.90	0.13
Veterans Affairs	1,059.80	2.94
<b>Total</b>	<b>36,049.70</b>	<b>100.00</b>

## C MET calculations and supporting data

### C1 MET Total Budget

**Table C1.1: Actual and forecast total MET budget, 2006/07 – 2016/17 (N\$ Millions)**

	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16	2016/ 17
Actual Budget	151.15	299.92	209.29	305.65	347.93	798.85	572.45	656.80	725.37	-	-
Forecast Budget	-	-	-	-	-	-	-	-	725.37	760.69	751.41

**Table C1.2: Actual MET budget allocation by programme, 2006/07 – 2013/14 (N\$ Millions)**

Year / Programme	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Wildlife and protected area management	66.04	90.61	92.58	136.70	114.87	181.13	185.44
Protection and management of key species and natural resources	13.59	13.93	16.50	30.65	23.03	53.38	61.13
Community-based natural resource management and tourism	10.33	53.56	23.12	24.24	10.84	19.68	130.85
Regulation of environmental protection and sustainable resource management	9.39	10.99	12.32	51.80	15.80	40.81	42.02
Tourism development	39.43	117.24	48.74	48.97	53.25	363.70	-
Gaming / Gambling	-	-	-	-	1.70	2.00	-
Improving the economic value of natural resources and protected areas in MET jurisdiction	12.39	13.57	16.04	13.29	-	-	-
Infrastructure development and maintenance	-	-	-	-	-	-	15.08
Administration, coordination and investment	-	-	-	-	128.43	140.16	137.94
<b>Programme Total</b>	<b>151.15</b>	<b>299.92</b>	<b>209.29</b>	<b>305.65</b>	<b>347.93</b>	<b>800.85</b>	<b>572.45</b>
<b>MTEF Total Budget</b>	<b>151.15</b>	<b>299.92</b>	<b>209.29</b>	<b>305.65</b>	<b>347.93</b>	<b>791.56</b>	<b>572.45</b>
<b>Accountability Report Budget</b>	<b>-</b>	<b>-</b>	<b>209.29</b>	<b>305.65</b>	<b>347.93</b>	<b>798.85</b>	<b>572.45</b>

## C2 MET Biodiversity Budget

### C2.1 Supporting data and calculations

**Table C2.1: Estimation of the MET biodiversity budget by programme, 2006/07 – 2012/13 (N\$ Millions)**

Year Programme	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Wildlife and protected area management	66.04	90.61	92.58	136.70	114.87	181.13	185.44
Protection and management of key species and natural resources	13.59	13.93	16.50	30.65	23.03	21.92	46.43
Community-based natural resource management and tourism	10.33	53.56	23.12	24.24	10.84	18.55	10.79
Regulation of environmental protection and sustainable resource management	9.39	10.77	12.32	51.80	8.30	26.67	28.25
Tourism development	0.60	1.78	13.89	11.00	5.25	7.28	-
Gaming / Gambling	-	-	-	-	-	-	-
Improving the economic value of natural resources and protected areas in MET jurisdiction	9.75	13.25	13.25	12.79	-	-	-
Infrastructure development and maintenance	-	-	-	-	-	-	6.36
Administration, coordination and investment	-	-	-	-	77.18	70.70	83.32
<b>Total Biodiversity Budget</b>	<b>109.68</b>	<b>182.37</b>	<b>171.66</b>	<b>267.18</b>	<b>239.48</b>	<b>326.24</b>	<b>360.59</b>
<b>Total Budget</b>	<b>151.15</b>	<b>299.92</b>	<b>209.29</b>	<b>305.65</b>	<b>347.93</b>	<b>798.85</b>	<b>572.45</b>
<b>Biodiversity Budget as Percentage of Total</b>	<b>72.56</b>	<b>60.81</b>	<b>82.02</b>	<b>87.42</b>	<b>68.83</b>	<b>40.84</b>	<b>62.99</b>

**Table C2.2: Wildlife and protected area management biodiversity budget calculation (N\$ Millions)**

	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Total budgeted activities	62.45	72.45	92.77	136.70	114.87	189.32	185.85
Total biodiversity-relevant activities	62.45	72.45	92.77	136.70	114.87	189.32	185.85
Proportion of biodiversity-relevant activities	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Revised Budget	66.04	90.61	92.58	136.70	114.87	181.13	185.44
<b>Biodiversity budget</b>	<b>66.04</b>	<b>90.61</b>	<b>92.58</b>	<b>136.70</b>	<b>114.87</b>	<b>181.13</b>	<b>185.44</b>

**Table C2.3: Protection and management of key species and natural resources biodiversity budget calculation (N\$ Millions)**

	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Total budgeted activities	13.25	12.30	16.50	30.65	23.03	53.25	65.20
Total biodiversity-relevant activities	13.25	12.30	16.50	30.65	23.03	21.87	49.52
Proportion of biodiversity-relevant activities	1.00	1.00	1.00	1.00	1.00	0.41	0.76
Revised Budget	13.59	13.93	16.50	30.65	23.03	53.38	61.13
<b>Biodiversity budget</b>	<b>13.59</b>	<b>13.93</b>	<b>16.50</b>	<b>30.65</b>	<b>23.03</b>	<b>21.92</b>	<b>46.43</b>

**Table C2.4: Community-based natural resource management and tourism biodiversity budget calculation (N\$ Millions)**

	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Total budgeted activities	9.93	51.13	23.12	24.24	10.84	19.68	128.58
Total biodiversity-relevant activities	9.93	51.13	23.12	24.24	10.84	18.55	10.60
Proportion of biodiversity-relevant activities	1.00	1.00	1.00	1.00	1.00	0.94	0.08
Revised Budget	10.33	53.56	23.12	24.24	10.84	19.68	130.85
<b>Biodiversity budget</b>	<b>10.33</b>	<b>53.56</b>	<b>23.12</b>	<b>24.24</b>	<b>10.84</b>	<b>18.55</b>	<b>10.79</b>

**Table C2.5: Regulation of environmental protection and sustainable resource management biodiversity budget calculation (N\$ Millions)**

	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Total budgeted activities	9.01	9.71	12.30	51.80	15.80	40.44	41.96
Total biodiversity-relevant activities	9.01	9.51	12.30	51.80	8.30	24.11	23.96
Proportion of biodiversity-relevant activities	1.00	0.98	1.00	1.00	0.53	0.60	0.57
Revised Budget	9.39	10.99	12.32	51.80	15.80	40.81	42.02
<b>Biodiversity budget</b>	<b>9.39</b>	<b>10.77</b>	<b>12.32</b>	<b>51.80</b>	<b>8.30</b>	<b>26.67*</b>	<b>28.25*</b>

\*The biodiversity budget for 2011/12 and 2012/13 is calculated slightly differently as it includes EIF project expenditures. This is discussed in Section A1.2.2.



**Table C2.10: Administration, coordination and investment biodiversity budget calculation (N\$ Millions)**

	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Total budgeted activities	-	-	-	-	128.43	131.51	67.07
Total biodiversity-relevant activities	-	-	-	-	77.18	66.34	40.51
Proportion of biodiversity-relevant activities	0.00	0.00	0.00	0.00	0.60	0.50	0.60
Revised Budget	-	-	-	-	128.43	140.16	137.94
<b>Biodiversity budget</b>	-	-	-	-	<b>77.18</b>	<b>70.70</b>	<b>83.32</b>

## C2.2 EIF

The Environmental Investment Fund (EIF) is a State Owned Enterprise (SOE) that receives its funding primarily from MET and is accountable to the Minister, but is governed by a board of Directors that are not necessarily Government employees. Additional revenue sources are being explored by the EIF, and its Strategic Plan identifies proportions of proposed environmental taxes and levies as being key going forward.

The EIF annual report for 2012/13 illustrates that it made twenty five grants for a total of N\$7.56m, of which we identify eleven, receiving N\$3.29m (44%), as being relevant to biodiversity. Four of these grants, however, also appear in the 2011/12 annual report, so it seems the 2012/13 report is cumulative rather than annual. As a result, we attribute grants of N\$1.17m to biodiversity-related projects in 2011/12, and of N\$2.13m (the grants for the seven additional projects) in 2012/13.

In calculating the estimates of the biodiversity budgets and biodiversity expenditure for MET in these years, we do not include the MET contribution to EIF as relevant to biodiversity, but subsequently add the relevant grant expenditure to the total of the other relevant activities. As a result, the proportion of the total budget that is relevant to biodiversity does not include these values.

We also know that such expenditure will continue, but extrapolating it forwards is difficult. We can, however, use the EIF budget allocations as a guide. The EIF received N\$17.5m from MET in 2011/12 and N\$18m in 2012/13 and 2013/14; the MTEF forecasts suggest this budget will be maintained over the 2013/14 – 2015/16 MTEF period. As a result, we take a conservative estimate of EIF expenditure on biodiversity-related projects averaging N\$2.5m annually between 2013/14 and 2020/21.

It should be noted that these values are likely to underestimate the true size of the biodiversity-relevant budgets and expenditure from EIF, as they do not include any administration or initial start-up costs. However, given limited data we take a conservative approach in just focusing on the projects that have been funded.

## C3 MET Expenditure

**Table C3.1: Actual MET expenditure by programme, 2006/07 – 2012/13 (N\$ Millions)**

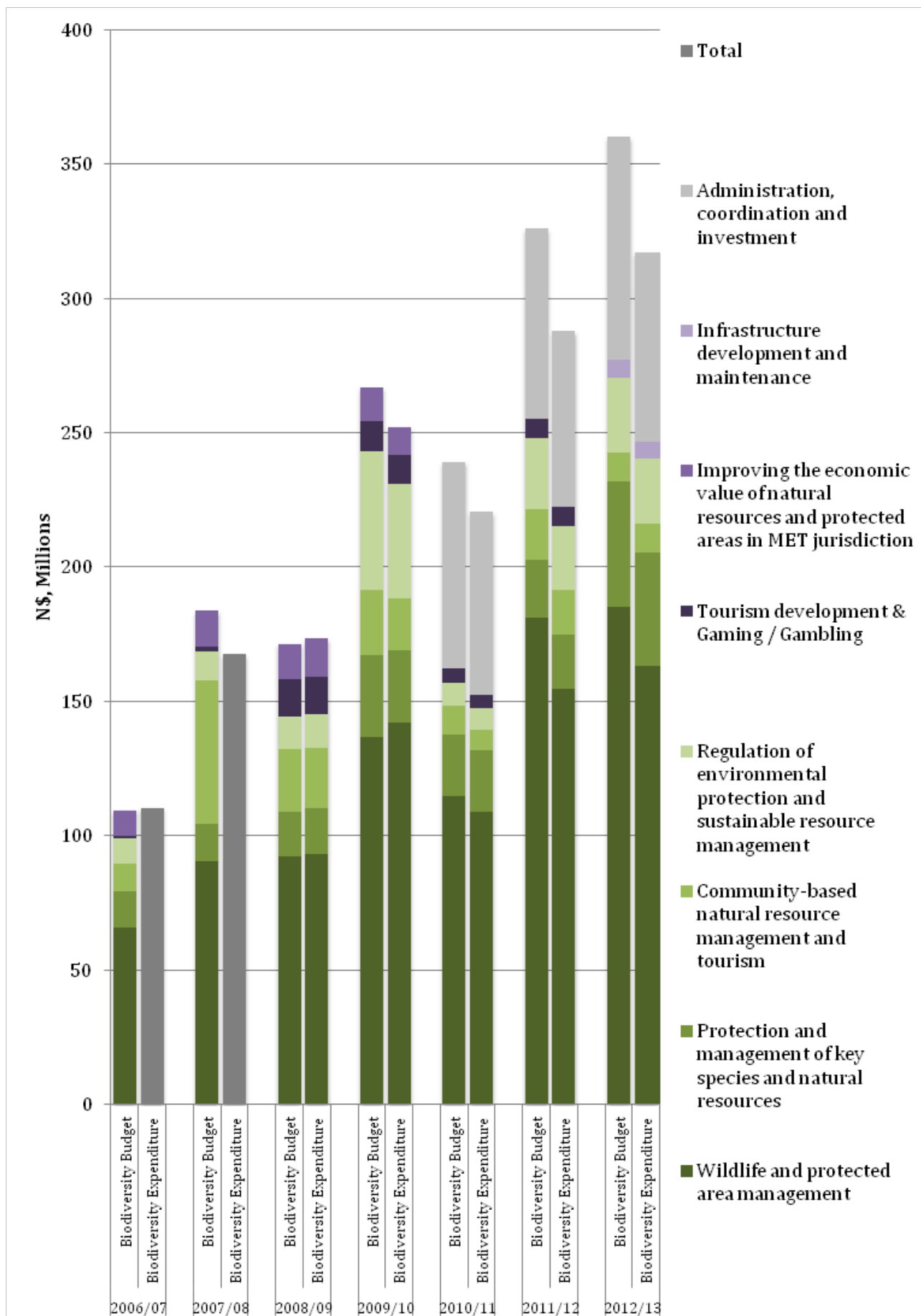
Year Programme	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Wildlife and protected area management	-	-	93.44	142.17	109.02	154.82	163.48
Protection and management of key species and natural resources	-	-	16.99	26.98	22.84	49.36	55.69
Community-based natural resource management and tourism	-	-	23.36	20.57	7.85	17.62	128.37
Regulation of environmental protection and sustainable resource management	-	-	12.74	42.99	15.21	37.89	38.69
Tourism development	-	-	48.85	47.01	48.89	361.26	-
Gaming / Gambling	-	-	-	-	1.61	-	-
Improving the economic value of natural resources and protected areas in MET jurisdiction	-	-	16.99	10.90	-	-	-
Infrastructure development and maintenance	-	-	-	-	-	-	15.23
Administration, coordination and investment	-	-	-	-	113.51	129.51	116.65
<b>Total Expenditure</b>	<b>152.22</b>	<b>275.84</b>	<b>212.38</b>	<b>290.60</b>	<b>318.93</b>	<b>750.46</b>	<b>518.11</b>
<b>Total Budget</b>	<b>151.15</b>	<b>299.92</b>	<b>209.29</b>	<b>305.65</b>	<b>347.93</b>	<b>798.85</b>	<b>572.45</b>
<b>Expenditure as a Percentage of Total Budget</b>	<b>100.71</b>	<b>91.97</b>	<b>101.48</b>	<b>95.08</b>	<b>91.66</b>	<b>93.94</b>	<b>90.51</b>

## C4 MET Biodiversity Expenditure

**Table C4.1: Estimation of the MET biodiversity expenditure by programme, 2006/07 – 2012/13 (N\$ Millions)**

Year Programme	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Wildlife and protected area management	66.51	83.34	93.44	142.17	109.02	154.82	163.48
Protection and management of key species and natural resources	13.68	12.81	16.99	26.98	22.84	20.27	42.30
Community-based natural resource management and tourism	10.40	49.26	23.36	20.57	7.85	16.61	10.58
Regulation of environmental protection and sustainable resource management	9.45	9.90	12.74	42.99	9.16	25.89	26.72
Tourism development	0.60	1.63	13.92	10.56	4.82	7.23	-
Gaming / Gambling	-	-	-	-	-	-	-
Improving the economic value of natural resources and protected areas in MET jurisdiction	9.81	12.18	14.04	10.49	-	-	-
Infrastructure development and maintenance	-	-	-	-	-	-	6.42
Administration, coordination and investment	-	-	-	-	68.22	65.33	70.46
<b>Total Biodiversity Expenditure</b>	<b>110.46</b>	<b>167.73</b>	<b>174.50</b>	<b>253.75</b>	<b>221.91</b>	<b>290.14</b>	<b>319.97</b>
<b>Total Expenditure</b>	<b>152.22</b>	<b>275.84</b>	<b>212.38</b>	<b>290.60</b>	<b>318.93</b>	<b>750.46</b>	<b>518.11</b>
<b>Biodiversity Expenditure as a Percentage of Total Expenditure</b>	<b>72.56</b>	<b>60.81</b>	<b>82.17</b>	<b>87.32</b>	<b>69.58</b>	<b>38.66</b>	<b>61.76</b>

**Figure C4.1: MET biodiversity budget and biodiversity expenditure by programme, 2006/07 – 2012/13**



**Table C4.2: Wildlife and protected area management biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12	2012/13
Total programme expenditure	93.44	142.17	109.02	154.82	163.48
Proportion of activities relevant to biodiversity	1.00	1.00	1.00	1.00	1.00
<b>Biodiversity expenditure</b>	<b>93.44</b>	<b>142.17</b>	<b>109.02</b>	<b>154.82</b>	<b>163.48</b>

**Table C4.3: Protection and management of key species and natural resources biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12	2012/13
Total programme expenditure	16.99	26.98	22.84	49.36	55.69
Proportion of activities relevant to biodiversity	1.00	1.00	1.00	0.41	0.76
<b>Biodiversity expenditure</b>	<b>16.99</b>	<b>26.98</b>	<b>22.84</b>	<b>20.27</b>	<b>42.30</b>

**Table C4.4: Community-based natural resource management and tourism biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12	2012/13
Total programme expenditure	23.36	20.57	7.85	17.62	128.37
Proportion of activities relevant to biodiversity	1.00	1.00	1.00	0.94	0.08
<b>Biodiversity expenditure</b>	<b>23.36</b>	<b>20.57</b>	<b>7.85</b>	<b>16.61</b>	<b>10.58</b>

**Table C4.5: Regulation of environmental protection and sustainable resource management biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12	2012/13
Total programme expenditure	12.74	42.99	15.21	37.89	38.69
Proportion of activities relevant to biodiversity	1.00	1.00	0.53	0.60	0.57
<b>Biodiversity expenditure</b>	<b>12.74</b>	<b>42.99</b>	<b>9.16*</b>	<b>24.72*</b>	<b>24.59*</b>

\*The biodiversity expenditure for 2010/11, 2011/12 and 2012/13 is calculated slightly differently as it includes EIF project expenditures. This is discussed in Section A1.2.2.

**Table C4.6: Tourism development biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12	2012/13
Total programme expenditure	48.85	47.01	48.89	361.26	-
Proportion of activities relevant to biodiversity	0.29	0.22	0.10	0.02	-
<b>Biodiversity expenditure</b>	<b>13.92</b>	<b>10.56</b>	<b>4.82</b>	<b>7.23</b>	<b>-</b>

**Table C4.7: Gaming / Gambling biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12	2012/13
Total programme expenditure	-	-	1.61	-	-
Proportion of activities relevant to biodiversity	-	-	0.00	-	-
<b>Biodiversity expenditure</b>	-	-	<b>0.00</b>	-	-

**Table C4.8: Improving the economic value of natural resources and protected areas in MET jurisdiction biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12	2012/13
Total programme expenditure	16.99	10.90	-	-	-
Proportion of activities relevant to biodiversity	0.83	0.96	-	-	-
<b>Biodiversity expenditure</b>	<b>14.04</b>	<b>10.49</b>	-	-	-

**Table C4.9: Infrastructure development and maintenance biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12	2012/13
Total programme expenditure	-	-	-	-	15.23
Proportion of activities relevant to biodiversity	-	-	-	-	0.42
<b>Biodiversity expenditure</b>	-	-	-	-	<b>6.42</b>

**Table C4.10: Administration, coordination and investment biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12	2012/13
Total programme expenditure	-	-	113.51	129.51	116.65
Proportion of activities relevant to biodiversity	-	-	0.60	0.50	0.60
<b>Biodiversity expenditure</b>	-	-	<b>68.22</b>	<b>65.33</b>	<b>70.46</b>



**Table C5.2: Calculation of programme-level biodiversity budgets in 2013/14**

	Wildlife and protected area management	Protection and management of key species and natural resources	Community-based natural resource management and tourism	Regulation of environmental protection and sustainable resource management	Tourism development	Gaming / Gambling	Improving the economic value of natural resources and protected areas in MET jurisdiction	Infrastructure development and maintenance	Administration, coordination and investment
Total Budgeted Activities (1)	129.63	53.37	69.94	37.32	0.00	0.00	0.00	122.80	61.95
Total Biodiversity Relevant Budget (2)	129.63	45.72	16.80	19.32	0.00	0.00	0.00	49.30	39.11
Proportion of budgeted activities relevant to biodiversity (3)	1.00	0.86	0.24	0.52	0.00	0.00	0.00	0.40	0.63
Total Programme Budget (4)	129.63	53.37	71.94	37.32	0.00	0.00	0.00	122.80	61.95
Biodiversity-relevant budget scaled by programme budget [(2) * (4)/(1)]	129.63	45.72	17.28	19.32	0.00	0.00	0.00	49.30	39.11
Total MET budget allocation (5)					656.80				
Total MET budgeted activities (6)					475.00				
Ratio of MET Allocation :MET Activities (5/6)					1.38				
<b>Final biodiversity budget [(2) * (4)/(1) * (5)/(6)]</b>	<b>179.24</b>	<b>63.22</b>	<b>23.89</b>	<b>29.21*</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>68.17</b>	<b>54.08</b>

\* The 'Final biodiversity budget' for the 'Regulation of environmental protection and sustainable resource management' programme also includes an extra N\$2.5m added on after the calculation is made. This is to account for project biodiversity-relevant expenditure on project grants by the EIF as discussed in Section A1.2.2.

**Table C5.3: Calculation of programme-level biodiversity budgets in 2014/15**

	Wildlife and protected area management	Protection and management of key species and natural resources	Community-based natural resource management and tourism	Regulation of environmental protection and sustainable resource management	Tourism development	Gaming / Gambling	Improving the economic value of natural resources and protected areas in MET jurisdiction	Infrastructure development and maintenance	Administration, coordination and investment
MTEF budget (1)	241.79	49.76	104.91	52.12	0.00	0.00	0.00	146.18	130.62
Proportion of budgeted activities relevant to biodiversity in 2013/14 (2)	1.00	0.86	0.24	0.52	0.00	0.00	0.00	0.40	0.63
<b>Biodiversity budget [(1)*(2)]</b>	<b>241.79</b>	<b>42.63</b>	<b>25.20</b>	<b>29.48*</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>58.69</b>	<b>82.46</b>

\* The 'Final biodiversity budget' for the 'Regulation of environmental protection and sustainable resource management' programme also includes an extra N\$2.5m added on after the calculation is made. This is to account for project biodiversity-relevant expenditure on project grants by the EIF as discussed in Section A1.2.2.

**Table C5.4: Calculation of programme-level biodiversity budgets in 2015/16**

	Wildlife and protected area management	Protection and management of key species and natural resources	Community-based natural resource management and tourism	Regulation of environmental protection and sustainable resource management	Tourism development	Gaming / Gambling	Improving the economic value of natural resources and protected areas in MET jurisdiction	Infrastructure development and maintenance	Administration, coordination and investment
MTEF budget (1)	280.55	53.43	114.24	55.82	0.00	0.00	0.00	115.72	160.51
Proportion of budgeted activities relevant to biodiversity in 2013/14 (2)	1.00	0.86	0.24	0.52	0.00	0.00	0.00	0.40	0.63
<b>Biodiversity budget [(1)*(2)]</b>	<b>280.55</b>	<b>45.77</b>	<b>27.44</b>	<b>31.40*</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>46.46</b>	<b>64.44</b>

\* The 'Final biodiversity budget' for the 'Regulation of environmental protection and sustainable resource management' programme also includes an extra N\$2.5m added on after the calculation is made. This is to account for project biodiversity-relevant expenditure on project grants by the EIF as discussed in Section A1.2.2.

**Table C5.5: Calculation of programme-level biodiversity budgets in 2016/17**

	Wildlife and protected area management	Protection and management of key species and natural resources	Community-based natural resource management and tourism	Regulation of environmental protection and sustainable resource management	Tourism development	Gaming / Gambling	Improving the economic value of natural resources and protected areas in MET jurisdiction	Infrastructure development and maintenance	Administration, coordination and investment
MTEF budget (1)	270.12	65.02	71.41	54.98	0.00	0.00	0.00	140.93	129.37
Proportion of budgeted activities relevant to biodiversity in 2013/14 (2)	1.00	0.86	0.24	0.52	0.00	0.00	0.00	0.40	0.63
<b>Biodiversity budget [(1)*(2)]</b>	<b>270.12</b>	<b>55.70</b>	<b>17.15</b>	<b>30.96*</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>88.97</b>	<b>81.67</b>

\* The 'Final biodiversity budget' for the 'Regulation of environmental protection and sustainable resource management' programme also includes an extra N\$2.5m added on after the calculation is made. This is to account for project biodiversity-relevant expenditure on project grants by the EIF as discussed in Section A1.2.2.

**Table C5.6: Calculation of biodiversity expenditure under MTEF Projection A**

	2013/14	2014/15	2015/16	2016/17
Sum of programme-level biodiversity budgets (1)	417.81	480.24	520.59	520.05
Average ratio of biodiversity expenditure to biodiversity budget, 2010/11 – 2012/13 (2)	0.901			
<b>Biodiversity expenditure: MTEF Projection A [(1)*(2)]</b>	<b>376.34</b>	<b>432.58</b>	<b>468.92</b>	<b>468.43</b>

**Table C5.7: Calculation of biodiversity expenditure under MTEF Projection B**

	2013/14	2014/15	2015/16	2016/17
Sum of programme-level biodiversity budgets (1)	417.81	480.24	520.59	520.05
Average ratio of biodiversity expenditure to biodiversity budget, 2010/11 – 2012/13 (2)	0.901			
Total MET budget (3)	656.80	725.37	760.69	751.41
Average ratio of biodiversity budget to total budget, 2012/13 – 2013/14 (4)	0.63			
Biodiversity expenditure: MTEF Projection B (2013/14) [(1)*(2)]	376.34*	-	-	-
<b>Biodiversity expenditure: MTEF Projection B (2014/15 – 2016/17 [(2)*(3)*(4)]</b>	<b>-</b>	<b>412.38</b>	<b>432.47</b>	<b>427.19</b>

\* Note that the Projection A and Projection B estimates for 2013/14 are the same. This is because the data limitations require that it is calculated that way.

**Table C5.8: Estimates and projections of biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions)**

	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16	2016/ 17	2017/ 18	2018/ 19	2019/ 20	2020/ 21
Biodiversity Expenditure	110.46	167.73	174.50	253.75	221.91	290.14	319.97	-	-	-	-	-	-	-	-
Biodiversity Expenditure: MTEF Projection A	-	-	-	-	-	-	319.97	376.34	432.58	468.92	468.43	-	-	-	-
Biodiversity Expenditure: MTEF Projection B	-	-	-	-	-	-	319.97	376.34	412.38	432.47	427.19	-	-	-	-
Biodiversity Expenditure: Scenario 1A	-	-	-	-	-	-	-	-	432.58	465.46	498.34	531.23	564.11	597.00	629.88
Biodiversity Expenditure: Scenario 2A	-	-	-	-	-	-	-	-	432.58	481.61	530.64	579.68	628.71	677.74	726.78
Biodiversity Expenditure: Scenario 3A	-	-	-	-	-	-	-	-	-	-	468.43	475.84	483.24	490.64	498.04

## D MAWF calculations and supporting data

### D1 MAWF Total Budget

**Table D1.1: Actual and forecast total MAWF budget, 2006/07 – 2016/17 (N\$ Millions)**

	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16	2016/ 17
Actual Budget	640.45	644.77	948.63	1,234.49	1,518.74	2,295.26	2,034.23	2,359.50	2,618.45		
Forecast Budget									2,618.45	2,453.31	2,880.60

**Table D1.2: Actual MAWF budget allocation by programme, 2006/07 – 2013/14 (N\$ Millions)**

Year Programme	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Agricultural advice	176.48	166.47	270.17	-	-	-	-
Training	44.50	23.59	31.56	-	-	-	-
Agricultural infrastructures	39.55	92.73	100.12	-	-	-	-
Planning, marketing and food security	98.80	95.30	135.55	-	-	-	-
Integrated water resources management	40.29	53.36	89.10	80.58	100.21	123.37	105.93
Water supply to urban and rural communities	200.92	166.13	231.02	313.98	451.71	764.79	606.00
Forestry	39.90	47.20	91.10	102.56	112.46	146.05	124.74
Crop production and horticultural development	-	-	-	317.57	361.33	707.44	349.50
Livestock production, improvement and animal health control	-	-	-	304.84	367.07	423.31	428.57
Co-operatives regulation, development and promotion services	-	-	-	114.97	125.96	130.30	-
Agriculture planning, agro-business development and co-operative regulation	-	-	-	-	-	-	108.00
Institutional development and support services	-	-	-	-	-	-	311.50
<b>Programme Total</b>	<b>640.45</b>	<b>644.77</b>	<b>948.63</b>	<b>1,234.49</b>	<b>1,518.74</b>	<b>2,295.26</b>	<b>2,034.23</b>
<b>MTEF Total Budget</b>	<b>640.45</b>	<b>644.77</b>	<b>948.63</b>	<b>1,234.49</b>	<b>1,518.74</b>	<b>2,268.64</b>	<b>2,034.23</b>
<b>Accountability Report Budget</b>	<b>-</b>	<b>-</b>	<b>948.63</b>	<b>1,234.49</b>	<b>1,518.74</b>	<b>2,295.26</b>	<b>2,034.23</b>

## D2 MAWF Biodiversity Budget

**Table D2.1: Estimation of the MAWF biodiversity budget by programme, 2006/07 – 2012/13 (N\$ Millions)**

Year Programme	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Agricultural advice	7.00	13.83	20.73	-	-	-	-
Training	-	-	-	-	-	-	-
Agricultural infrastructures	-	-	-	-	-	-	-
Planning, marketing and food security	-	-	-	-	-	-	-
Integrated water resources management	-	10.17	20.08	-	-	-	-
Water supply to urban and rural communities	-	-	-	-	-	-	-
Forestry	35.47	47.20	91.10	102.56	104.22	139.95	124.74
Crop production and horticultural development	-	-	-	2.72	6.63	7.53	17.76
Livestock production, improvement and animal health control	-	-	-	40.45	51.49	58.88	2.18
Co-operatives regulation, development and promotion services	-	-	-	-	-	-	-
Agriculture planning, agro-business development and co-operative regulation	-	-	-	-	-	-	-
Institutional development and support services	-	-	-	-	-	-	13.82
<b>Total Biodiversity Budget</b>	<b>42.47</b>	<b>71.20</b>	<b>131.90</b>	<b>145.72</b>	<b>162.35</b>	<b>206.36</b>	<b>158.51</b>
<b>Total Budget</b>	<b>640.45</b>	<b>644.77</b>	<b>948.63</b>	<b>1,234.49</b>	<b>1,518.74</b>	<b>2,295.26</b>	<b>2,034.23</b>
<b>Biodiversity Budget as Percentage of Total</b>	<b>6.63</b>	<b>11.04</b>	<b>13.90</b>	<b>11.80</b>	<b>10.69</b>	<b>8.99</b>	<b>7.79</b>

**Table D2.2: Agricultural advice biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	174.20	216.66	270.19	174.20
Total biodiversity-relevant activities	6.91	18.00	20.73	6.91
Proportion of biodiversity-relevant activities	0.04	0.08	0.08	0.04
Revised Budget	176.48	166.47	270.17	176.48
Biodiversity budget	7.00	13.83	20.73	7.00
Table D2.3: Training biodiversity budget calculation (N\$ Millions)				
	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	43.98	23.59	27.32	-
Total biodiversity-relevant activities	-	-	-	-
Proportion of biodiversity-relevant activities	0.00	0.00	0.00	0.00
Revised Budget	44.50	23.59	31.56	-
<b>Biodiversity budget</b>	-	-	-	-

**Table D2.4: Agricultural infrastructures biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	39.44	52.73	100.11	-
Total biodiversity-relevant activities	-	-	-	-
Proportion of biodiversity-relevant activities	0.00	0.00	0.00	-
Revised Budget	39.55	92.73	100.12	-
<b>Biodiversity budget</b>	-	-	-	-

**Table D2.5: Planning, marketing and food security biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	98.08	95.30	135.55	-
Total biodiversity-relevant activities	-	-	-	-
Proportion of biodiversity-relevant activities	0.00	0.00	0.00	-
Revised Budget	98.80	95.30	135.55	-
<b>Biodiversity budget</b>	-	-	-	-

**Table D2.6: Integrated water resources management biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	39.60	53.36	89.10	108.95
Total biodiversity-relevant activities	-	10.17	20.08	-
Proportion of biodiversity-relevant activities	0.00	0.19	0.23	0.00
Revised Budget	40.29	53.36	89.10	80.58
<b>Biodiversity budget</b>	-	<b>10.17</b>	<b>20.08</b>	-

**Table D2.7: Water supply to urban and rural communities biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	199.90	174.13	231.02	285.59
Total biodiversity-relevant activities	-	-	-	-
Proportion of biodiversity-relevant activities	0.00	0.00	0.00	0.00
Revised Budget	200.92	166.13	231.02	313.98
<b>Biodiversity budget</b>	-	-	-	-

**Table D2.8: Forestry biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	39.52	46.81	91.10	102.03
Total biodiversity-relevant activities	35.14	46.81	91.10	102.03
Proportion of biodiversity-relevant activities	0.89	1.00	1.00	1.00
Revised Budget	39.90	47.20	91.10	102.56
<b>Biodiversity budget</b>	<b>35.47</b>	<b>47.20</b>	<b>91.10</b>	<b>102.56</b>

**Table D2.9: Crop production and horticultural development biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	-	-	-	317.17
Total biodiversity-relevant activities	-	-	-	2.71
Proportion of biodiversity-relevant activities	-	-	-	0.01
Revised Budget	-	-	-	317.57
<b>Biodiversity budget</b>	-	-	-	<b>2.72</b>

**Table D2.10: Livestock production, improvement and animal health control biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	-	-	-	316.53
Total biodiversity-relevant activities	-	-	-	42.00
Proportion of biodiversity-relevant activities	-	-	-	0.13
Revised Budget	-	-	-	304.84
<b>Biodiversity budget</b>	-	-	-	<b>40.45</b>

**Table D2.11: Co-operatives regulation, development and promotion services biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	-	-	-	114.73
Total biodiversity-relevant activities	-	-	-	-
Proportion of biodiversity-relevant activities	-	-	-	0.00
Revised Budget	-	-	-	114.97
<b>Biodiversity budget</b>	-	-	-	-

**Table D2.12: Agriculture planning, agro-business development and co-operatives regulation biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	-	-	-	-
Total biodiversity-relevant activities	-	-	-	-
Proportion of biodiversity-relevant activities	-	-	-	-
Revised Budget	-	-	-	-
<b>Biodiversity budget</b>	-	-	-	-

**Table D2.13: Institutional development and support services biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10
Total budgeted activities	-	-	-	-
Total biodiversity-relevant activities	-	-	-	-
Proportion of biodiversity-relevant activities	-	-	-	-
Revised Budget	-	-	-	-
<b>Biodiversity budget</b>	-	-	-	-

## D3 MAWF Total Expenditure

Table D3.1: Actual MAWF expenditure by programme, 2006/07 – 2012/13 (N\$ Millions)

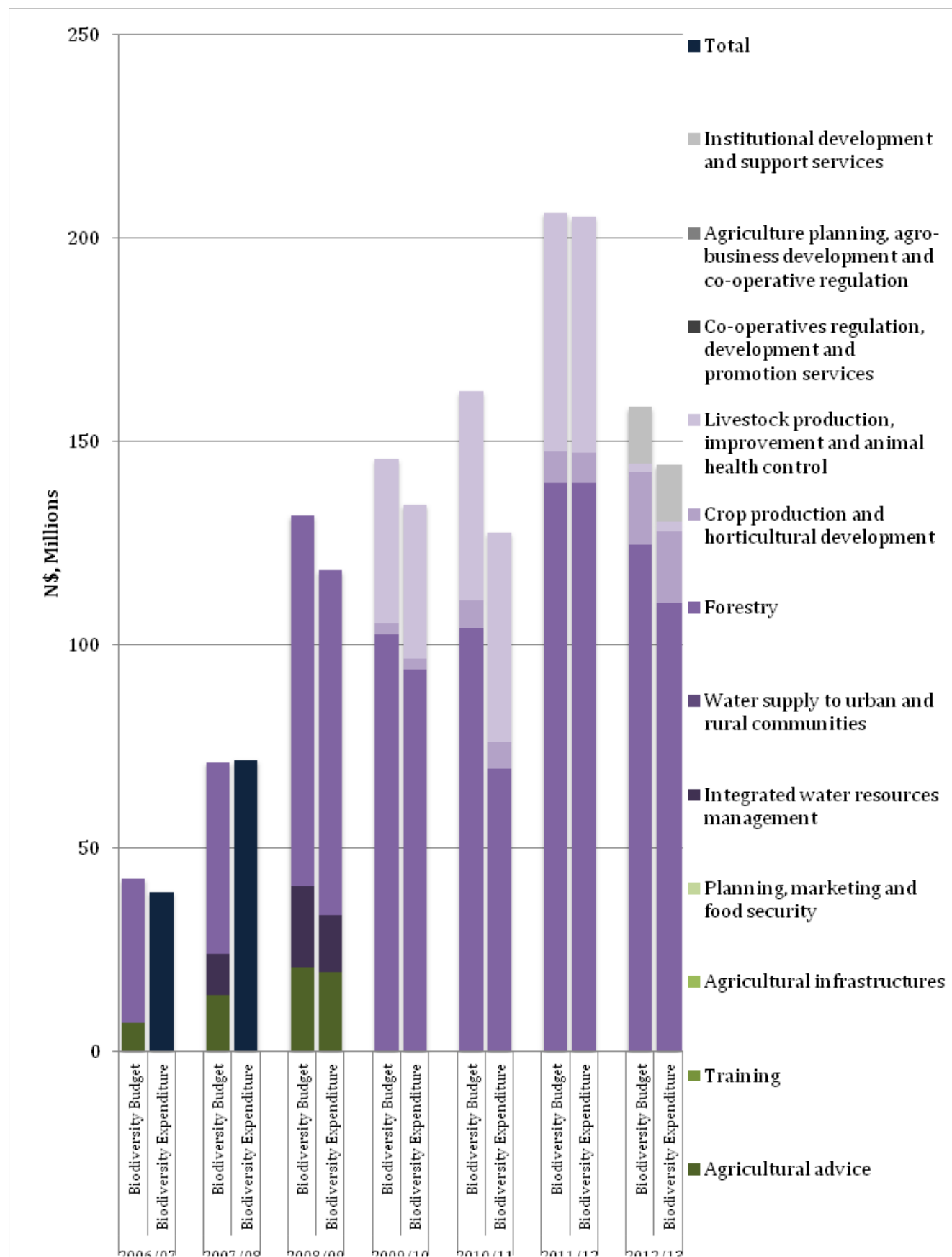
Year Programme	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Agricultural advice	-	-	256.37	-	-	-	-
Training	-	-	28.10	-	-	-	-
Agricultural infrastructures	-	-	95.70	-	-	-	-
Planning, marketing and food security	-	-	118.34	-	-	-	-
Integrated water resources management	-	-	62.18	70.58	85.47	87.17	58.61
Water supply to urban and rural communities	-	-	214.69	284.09	391.03	672.46	337.19
Forestry	-	-	84.69	93.92	78.29	145.71	110.29
Crop production and horticultural development	-	-	-	308.72	354.33	706.27	330.89
Livestock production, improvement and animal health control	-	-	-	286.27	350.29	420.77	416.74
Co-operatives regulation, development and promotion services	-	-	-	82.90	98.18	110.47	-
Agriculture planning, agro-business development and co-operative regulation	-	-	-	-	-	-	64.65
Institutional development and support services	-	-	-	-	-	-	257.25
<b>Total Expenditure</b>	<b>593.09</b>	<b>649.11</b>	<b>860.08</b>	<b>1126.48</b>	<b>1357.59</b>	<b>2142.84</b>	<b>1575.61</b>
<b>Total Budget</b>	<b>640.45</b>	<b>644.77</b>	<b>948.63</b>	<b>1234.49</b>	<b>1518.74</b>	<b>2295.26</b>	<b>2034.23</b>
<b>Expenditure as a Percentage of Total Budget</b>	<b>92.61</b>	<b>100.67</b>	<b>90.66</b>	<b>91.25</b>	<b>89.39</b>	<b>93.36</b>	<b>77.45</b>

## D4 MAWF Biodiversity Expenditure

**Table D4.1: Estimation of the MAWF biodiversity expenditure by programme, 2006/07 – 2012/13 (N\$ Millions)**

Year Programme	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Agricultural advice	6.48	13.92	19.67	-	-	-	-
Training	-	-	-	-	-	-	-
Agricultural infrastructures	-	-	-	-	-	-	-
Planning, marketing and food security	-	-	-	-	-	-	-
Integrated water resources management	-	10.24	14.01	-	-	-	-
Water supply to urban and rural communities	-	-	-	-	-	-	-
Forestry	32.85	47.51	84.69	93.92	69.50	139.73	110.29
Crop production and horticultural development	-	-	-	2.64	6.58	7.48	17.72
Livestock production, improvement and animal health control	-	-	-	37.98	51.63	58.21	2.18
Co-operatives regulation, development and promotion services	-	-	-	-	-	-	-
Agriculture planning, agro-business development and co-operative regulation	-	-	-	-	-	-	-
Institutional development and support services	-	-	-	-	-	-	14.16
<b>Total Biodiversity Expenditure</b>	<b>39.33</b>	<b>71.68</b>	<b>118.37</b>	<b>134.54</b>	<b>127.71</b>	<b>205.42</b>	<b>144.35</b>
<b>Total Expenditure</b>	<b>593.09</b>	<b>649.11</b>	<b>948.63</b>	<b>1234.49</b>	<b>1518.74</b>	<b>2295.26</b>	<b>2034.23</b>
<b>Biodiversity Expenditure as a Percentage of Total Expenditure</b>	<b>6.63</b>	<b>11.04</b>	<b>12.48</b>	<b>10.90</b>	<b>8.41</b>	<b>8.95</b>	<b>7.10</b>

**Figure D4.1: MAWF biodiversity budget and biodiversity expenditure by programme, 2006/07 – 2012/13**



**Table D4.2: Agricultural advice biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	256.37	-
Proportion of activities relevant to biodiversity	0.08	-
<b>Biodiversity expenditure</b>	<b>19.67</b>	<b>-</b>

**Table D4.3: Training biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	28.10	-
Proportion of activities relevant to biodiversity	0.00-	-
<b>Biodiversity expenditure</b>	<b>0.00</b>	<b>-</b>

**Table D4.4: Agricultural infrastructures biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	95.70	-
Proportion of activities relevant to biodiversity	0.00-	-
<b>Biodiversity expenditure</b>	<b>0.00</b>	<b>-</b>

**Table D4.5: Planning, marketing and food security biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	118.34	-
Proportion of activities relevant to biodiversity	0.00-	-
<b>Biodiversity expenditure</b>	<b>0.00</b>	<b>-</b>

**Table D4.6: Integrated water resources management biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	62.18	70.58
Proportion of activities relevant to biodiversity	0.23	0.00
<b>Biodiversity expenditure</b>	<b>14.01</b>	<b>-</b>

**Table D4.7: Water supply to urban and rural communities expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	-	-
Proportion of activities relevant to biodiversity	-	-
<b>Biodiversity expenditure</b>	<b>-</b>	<b>-</b>

**Table D4.8: Forestry biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	84.69	93.92
Proportion of activities relevant to biodiversity	1.00	1.00
<b>Biodiversity expenditure</b>	<b>84.69</b>	<b>93.92</b>

**Table D4.9: Crop production and horticultural development biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	-	308.72
Proportion of activities relevant to biodiversity	-	0.01
<b>Biodiversity expenditure</b>	<b>-</b>	<b>2.64</b>

**Table D4.10: Livestock production, improvement and animal health control biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	-	286.27
Proportion of activities relevant to biodiversity	-	0.13
<b>Biodiversity expenditure</b>	<b>-</b>	<b>37.98</b>

**Table D4.11: Co-operatives regulation, development and promotion services biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	-	-
Proportion of activities relevant to biodiversity	-	-
<b>Biodiversity expenditure</b>	<b>-</b>	<b>-</b>

**Table D4.12: Agriculture planning, agro-business development and co-operatives regulation biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	-	-
Proportion of activities relevant to biodiversity	-	-
<b>Biodiversity expenditure</b>	-	-

**Table D4.13 Institutional development and support services biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10
Total programme expenditure	-	-
Proportion of activities relevant to biodiversity	-	-
<b>Biodiversity expenditure</b>	-	-

## D5 MAWF Projected Expenditure

**Table D5.1: Evolution of MAWF budget allocations and MTEF forecasts, 2006/07 – 2016/17 (N\$ Millions)**

	Final Budget	2006/07 MTEF	2007/08 MTEF	2008/09 MTEF	2009/10 MTEF	2010/11 MTEF	2011/12 MTEF	2012/13 MTEF	2013/14 MTEF	2014/15 MTEF
2006/07	640.45	634.44	-	-	-	-	-	-	-	-
2007/08	644.77	620.71	652.77	-	-	-	-	-	-	-
2008/09	948.63	660.92	686.16	948.63	-	-	-	-	-	-
2009/10	1,234.49	-	691.56	969.06	1,234.49	-	-	-	-	-
2010/11	1,518.74	-	-	1,057.46	1,346.95	1,515.74	-	-	-	-
2011/12	2,295.26	-	-	-	1,387.43	1,561.06	2,268.64	-	-	-
2012/13	2,034.23	-	-	-	-	1,788.89	1,970.49	2,034.23	-	-
2013/14	2,359.50	-	-	-	-	-	2,721.62	2,314.43	2,359.50	-
2014/15	2,618.45	-	-	-	-	-	-	2,406.22	2,490.45	2,618.45
2015/16	-	-	-	-	-	-	-	-	2,282.48	2,453.31
2016/17	-	-	-	-	-	-	-	-	-	2,880.60

**Table D5.2: Calculation of biodiversity expenditure under MTEF Projection A**

	2013/14	2014/15	2015/16	2016/17
Average ratio of biodiversity expenditure to biodiversity budget, 2010/11 – 2012/13 (2)	0.898			
Total MAWF budget (2)	2,359.50	2,618.45	2,453.45	2,880.60
Average ratio of biodiversity budget to total budget, 2010/11 – 2012/13 (3)	0.092			
<b>Biodiversity expenditure: MTEF Projection B (2014/15 – 2016/17 [(1)*(2)*(3)])</b>	<b>193.94</b>	<b>215.23</b>	<b>201.65</b>	<b>236.78</b>

**Table D5.3: Calculation of biodiversity expenditure under MTEF Projection B**

	2013/14	2014/15	2015/16	2016/17
Average ratio of biodiversity expenditure to biodiversity budget, 2010/11 – 2012/13 (2)	0.898			
Total MAWF budget (2)	2,359.50	2,618.45	2,453.45	2,880.60
Ratio of biodiversity budget to total budget, 2012/13	0.078			
<b>Biodiversity expenditure: MTEF Projection B (2014/15 – 2016/17 [(1)*(2)*(3)])</b>	<b>165.02</b>	<b>183.13</b>	<b>171.58</b>	<b>201.47</b>

**Table D5.4: Calculation of biodiversity expenditure under MTEF Projection C**

	2013/14	2014/15	2015/16	2016/17
Average ratio of biodiversity expenditure to biodiversity budget, 2010/11 – 2012/13 (21)	0.898			
Total MAWF budget (2)	2,359.50	2,618.45	2453.45	2,880.60
Projected ratio of biodiversity budget to total budget in 2013/14 if follows linear trend from 2009/10 to 2012/13	0.064			
<b>Biodiversity expenditure: MTEF Projection B (2014/15 – 2016/17 [(1)*(2)*(3)]</b>	<b>135.23</b>	<b>150.07</b>	<b>140.61</b>	<b>165.10</b>

**Table D5.5: Estimates and projections of MAWF biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions)**

	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16	2016/ 17	2017/ 18	2018/ 19	2019/ 20	2020/ 21
Biodiversity Expenditure	39.33	71.68	118.37	134.54	127.71	205.42	144.35	-	-	-	-	-	-	-	-
Biodiversity Expenditure: MTEF Projection A	-	-	-	-	-	-	144.35	193.94	215.23	201.65	236.78	-	-	-	-
Biodiversity Expenditure: MTEF Projection B	-	-	-	-	-	-	144.35	165.02	183.13	171.58	201.47	-	-	-	-
Biodiversity Expenditure: MTEF Projection C	-	-	-	-	-	-	144.35	135.23	150.07	140.61	165.10	-	-	-	-
Biodiversity Expenditure: Scenario 1B	-	-	-	-	-	-	-	-	183.13	204.27	225.41	246.55	267.69	288.83	309.97
Biodiversity Expenditure: Scenario 2B	-	-	-	-	-	-	-	-	183.13	193.85	204.57	215.28	226.00	236.71	247.43
Biodiversity Expenditure: Scenario 3B	-	-	-	-	-	-	-	-	183.13	186.91	190.69	194.46	198.24	202.01	205.79
Biodiversity Expenditure: Scenario 4B	-	-	-	-	-	-	-	-	-	-	201.47	210.64	219.80	228.97	238.14

## E MFMR calculations and supporting data

### E1 MFMR Total Budget

**Table E1.1: Actual and forecast total MFMR budget, 2006/07 – 2016/17 (N\$ Millions)**

	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16	2016/ 17
Actual Budget	133.03	163.71	168.08	257.69	322.18	244.18	257.46	282.72	368.75	-	-
Forecast Budget	-	-	-	-	-	-	-	-	368.75	356.32	373.47

**Table E1.2: Actual MFMR budget allocation by programme, 2006/07 – 2013/14 (N\$ Millions)**

Year Programme	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Surveys and stock assessment	41.63	29.17	42.06	82.08	108.34	57.44	52.23
Human resources development	1.51	1.60	1.91	2.36	#VALUE!	3.60	3.40
Monitoring, control and surveillance	78.13	81.01	81.24	101.65	120.18	111.32	85.52
Promotion of farming with aquatic species	10.82	51.93	-	-	-	-	-
Promotion of marine and inland aquaculture	-	-	42.86	71.60	93.66	71.83	49.59
Coordination and support services	-	-	-	-	-	-	49.53
Policy and economic advice	-	-	-	-	-	-	15.55
Tax revenue and administration	-	-	-	-	-	-	1.64
Programme Total	132.08	163.71	168.08	257.69	322.18	244.18	257.46
MTEF Total Budget	133.03	163.71	168.08	257.69	322.18	238.89	257.46
Accountability Report Budget	-	-	168,081	257,694	322,180	244,180	257,463

## E2 MFMR Biodiversity Budget

**Table E2.1: Estimation of the MAWF biodiversity budget by programme, 2006/07 – 2012/13 (N\$ Millions)**

Year Programme	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Surveys and stock assessment	41.63	29.17	42.06	82.08	108.34	57.44	52.23
Human resources development	-	1.28	1.69	2.06	-	2.31	1.32
Monitoring, control and surveillance	74.40	78.03	81.24	101.65	120.18	108.66	81.52
Promotion of farming with aquatic species	-	-	-	-	-	-	-
Promotion of marine and inland aquaculture	-	-	7.83	11.19	23.93	15.80	10.50
Coordination and support services	-	-	-	-	-	-	10.61
Policy and economic advice	-	-	-	-	-	-	9.50
Tax revenue and administration	-	-	-	-	-	-	-
<b>Total Biodiversity Budget</b>	<b>116.03</b>	<b>108.48</b>	<b>132.83</b>	<b>196.98</b>	<b>252.45</b>	<b>184.21</b>	<b>165.69</b>
<b>Total Budget</b>	<b>133.03</b>	<b>163.71</b>	<b>168.08</b>	<b>257.69</b>	<b>322.18</b>	<b>244.18</b>	<b>257.46</b>
<b>Biodiversity Budget as Percentage of Total</b>	<b>87.22</b>	<b>66.26</b>	<b>79.03</b>	<b>76.44</b>	<b>78.36</b>	<b>75.44</b>	<b>64.35</b>

**Table E2.2: Surveys and stock assessment biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Total budgeted activities	41.88	29.17	42.06	93.13	120.29	55.05
Total biodiversity-relevant activities	41.88	29.17	42.06	93.13	120.29	55.05
Proportion of biodiversity-relevant activities	1.00	1.00	1.00	1.00	1.00	1.00
Revised Budget	41.63	29.17	42.06	82.08	108.34	57.44
Biodiversity budget	41.63	29.17	42.06	82.08	108.34	57.44
Table E2.3: Human resources development biodiversity budget calculation (N\$ Millions)						
	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Total budgeted activities	-	1.21	1.91	1.87	2.36	3.60
Total biodiversity-relevant activities	-	0.96	1.69	1.63	2.10	2.31
Proportion of biodiversity-relevant activities	0.00	0.80	0.88	0.87	0.89	0.64
Revised Budget	1.51	1.60	1.91	2.36	-	3.60
<b>Biodiversity budget</b>	<b>-</b>	<b>1.28</b>	<b>1.69</b>	<b>2.06</b>	<b>-</b>	<b>2.31</b>



**Table E2.8: Policy and economic advice biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Total budgeted activities	-	-	-	-	-	-
Total biodiversity-relevant activities	-	-	-	-	-	-
Proportion of biodiversity-relevant activities	-	-	-	-	-	-
Revised Budget	-	-	-	-	-	-
<b>Biodiversity budget</b>	-	-	-	-	-	-

**Table E2.9: Tax revenue administration biodiversity budget calculation (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Total budgeted activities	-	-	-	-	-	-
Total biodiversity-relevant activities	-	-	-	-	-	-
Proportion of biodiversity-relevant activities	-	-	-	-	-	-
Revised Budget	-	-	-	-	-	-
<b>Biodiversity budget</b>	-	-	-	-	-	-

## E3 MFMR Total Expenditure

**Table E3.1: Actual MFMR expenditure by programme, 2006/07 – 2012/13 (N\$ Millions)**

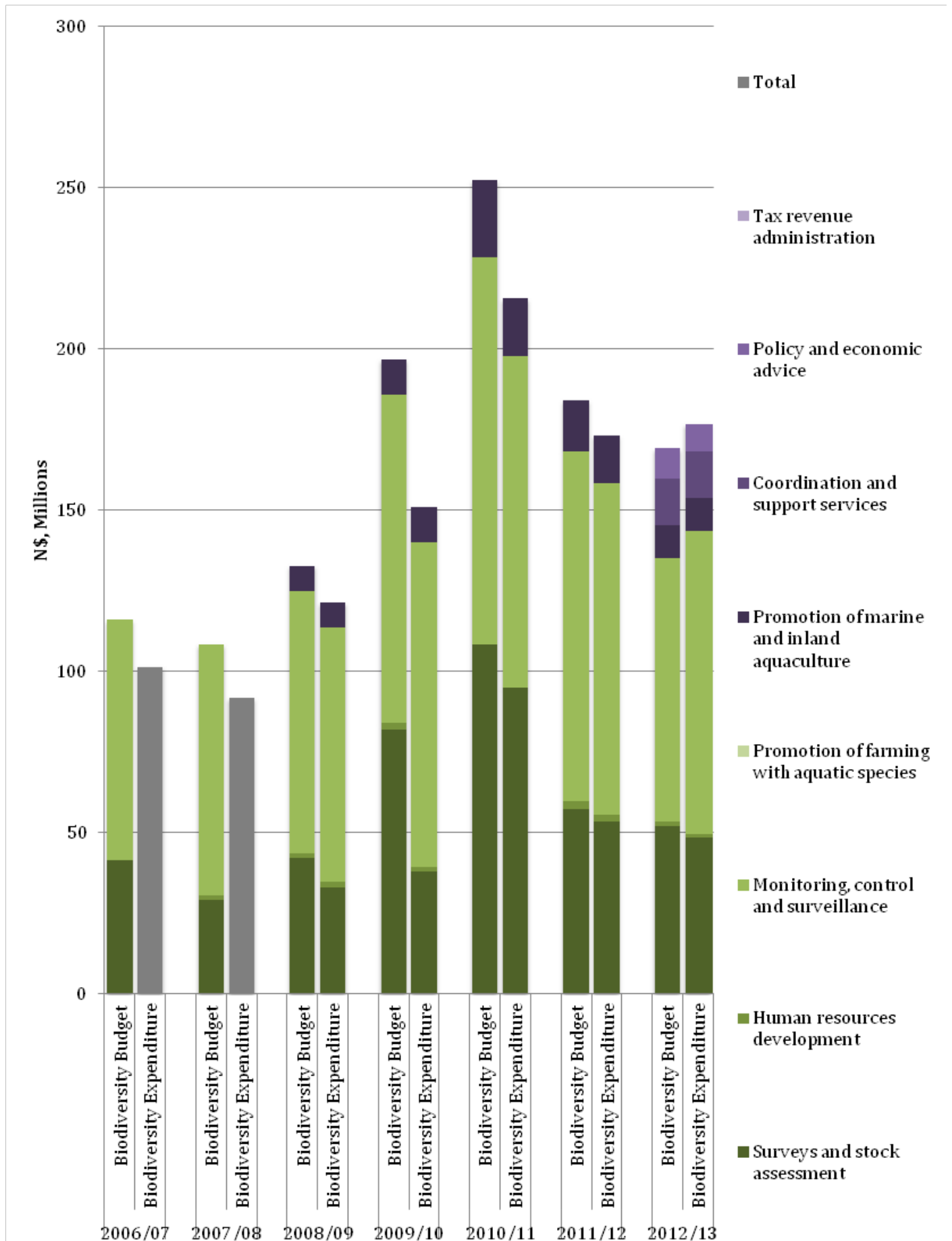
Year Programme	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Surveys and stock assessment	-	-	33.13	37.81	94.92	53.37	48.46
Human resources development	-	-	1.91	1.78	0.15	3.60	3.40
Monitoring, control and surveillance	-	-	79.04	100.74	102.64	105.11	97.18
Promotion of farming with aquatic species	-	-	-	-	-	-	-
Promotion of marine and inland aquaculture	-	-	41.23	70.90	70.35	68.14	44.61
Coordination and support services	-	-	-	-	-	-	39.53
Policy and economic advice	-	-	-	-	-	-	14.15
Tax revenue and administration	-	-	-	-	-	-	1.48
<b>Total Expenditure</b>	<b>116.36</b>	<b>138.55</b>	<b>155.32</b>	<b>211.23</b>	<b>268.07</b>	<b>230.23</b>	<b>248.80</b>
<b>Total Budget</b>	<b>133.03</b>	<b>163.71</b>	<b>168.08</b>	<b>257.69</b>	<b>322.18</b>	<b>244.18</b>	<b>257.46</b>
<b>Expenditure as a Percentage of Total Budget</b>	<b>87.47</b>	<b>84.63</b>	<b>92.41</b>	<b>81.97</b>	<b>83.20</b>	<b>94.29</b>	<b>96.64</b>

## E4 MFMR Biodiversity Expenditure

**Table E4.1: Estimation of the MFMR biodiversity expenditure by programme, 2006/07 – 2012/13 (N\$ Millions)**

Year Programme	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
Surveys and stock assessment	36.41	24.69	33.13	37.81	94.92	53.37	48.46
Human resources development	-	1.08	1.69	1.55	0.14	2.31	1.32
Monitoring, control and surveillance	65.08	66.04	79.04	100.74	102.64	102.61	93.87
Promotion of farming with aquatic species	-	-	-	-	-	-	-
Promotion of marine and inland aquaculture	-	-	7.53	11.08	17.97	14.99	10.34
Coordination and support services	-	-	-	-	-	-	11.06
Policy and economic advice	-	-	-	-	-	-	8.61
Tax revenue and administration	-	-	-	-	-	-	-
<b>Total Biodiversity Expenditure</b>	<b>101.49</b>	<b>91.81</b>	<b>121.40</b>	<b>151.18</b>	<b>215.67</b>	<b>173.28</b>	<b>173.65</b>
<b>Total Expenditure</b>	<b>116.36</b>	<b>138.55</b>	<b>155.32</b>	<b>211.23</b>	<b>268.07</b>	<b>230.23</b>	<b>248.80</b>
<b>Biodiversity Expenditure as a Percentage of Total Expenditure</b>	<b>87.22</b>	<b>66.26</b>	<b>78.16</b>	<b>71.57</b>	<b>80.46</b>	<b>75.26</b>	<b>69.79</b>

**Figure E4.1: MFMR biodiversity budget and biodiversity expenditure by programme, 2006/07 – 2012/13**



**Table E4.2: Surveys and stock assessment biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12
Total programme expenditure	33.13	37.81	94.92	53.37
Proportion of activities relevant to biodiversity	1.00	1.00	1.00	1.00
<b>Biodiversity expenditure</b>	<b>33.13</b>	<b>37.81</b>	<b>94.92</b>	<b>53.37</b>

**Table E4.3: Human resources development biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12
Total programme expenditure	1.91	1.78	0.15	3.60
Proportion of activities relevant to biodiversity	0.88	0.87	0.89	0.64
<b>Biodiversity expenditure</b>	<b>1.69</b>	<b>1.55</b>	<b>0.14</b>	<b>2.31</b>

**Table E4.4: Monitoring, control and surveillance biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12
Total programme expenditure	79.04	100.74	102.64	105.11
Proportion of activities relevant to biodiversity	1.00	1.00	1.00	0.98
<b>Biodiversity expenditure</b>	<b>79.04</b>	<b>100.74</b>	<b>102.64</b>	<b>102.61</b>

**Table E4.5: Promotion of farming with aquatic species biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12
Total programme expenditure	12.74	42.99	15.21	37.89
Proportion of activities relevant to biodiversity	0.00	0.00	0.00	0.00
<b>Biodiversity expenditure</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Table E4.6: Promotion of marine and inland aquaculture biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12
Total programme expenditure	41.23	70.90	70.35	68.14
Proportion of activities relevant to biodiversity	0.18	0.16	0.26	0.22
<b>Biodiversity expenditure</b>	<b>7.53</b>	<b>11.08</b>	<b>17.97</b>	<b>14.99</b>

**Table E4.7: Coordination and support services biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12
Total programme expenditure	-	-	-	-
Proportion of activities relevant to biodiversity	-	-	-	-
<b>Biodiversity expenditure</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Table E4.8: Policy and economic advice biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12
Total programme expenditure	-	-	-	-
Proportion of activities relevant to biodiversity	-	-	-	-
<b>Biodiversity expenditure</b>	-	-	-	-

**Table E4.9: Tax revenue administration biodiversity expenditure calculation (N\$ Millions)**

	2008/09	2009/10	2010/11	2011/12
Total programme expenditure	-	-	-	-
Proportion of activities relevant to biodiversity	-	-	-	-
<b>Biodiversity expenditure</b>	-	-	-	-

## E5 MFMR Projected Expenditure

**Table E5.1: Evolution of MAWF budget allocations and MTEF forecasts, 2006/07 – 2016/17 (N\$ Millions)**

	Final Budget	2006/07 MTEF	2007/08 MTEF	2008/09 MTEF	2009/10 MTEF	2010/11 MTEF	2011/12 MTEF	2012/13 MTEF	2013/14 MTEF	2014/15 MTEF
2006/07	133.03	131.91	-	-	-	-	-	-	-	-
2007/08	163.71	132.97	163.71	-	-	-	-	-	-	-
2008/09	168.08	144.27	168.00	168.08	-	-	-	-	-	-
2009/10	257.69	-	166.69	170.57	257.69	-	-	-	-	-
2010/11	322.18	-	-	198.04	263.41	317.39	-	-	-	-
2011/12	244.18	-	-	-	190.55	220.52	238.89	-	-	-
2012/13	257.46	-	-	-	-	223.53	241.31	257.46	-	-
2013/14	282.72	-	-	-	-	-	298.26	279.36	282.72	-
2014/15	368.75	-	-	-	-	-	-	312.96	286.94	368.75
2015/16	-	-	-	-	-	-	-	-	283.41	356.32
2016/17	-	-	-	-	-	-	-	-	-	373.47

**Table E5.2: Calculation of biodiversity expenditure under MTEF Projection A**

	2013/14	2014/15	2015/16	2016/17
Average ratio of biodiversity expenditure to biodiversity budget, 2010/11 – 2012/13 (1)	0.948			
Biodiversity budget (2)	178.77	246.32	238.70	238.35
<b>Biodiversity expenditure: MTEF Projection B (2014/15 – 2016/17 [(1)*(2)*(3)]</b>	<b>169.42</b>	<b>233.43</b>	<b>226.21</b>	<b>225.88</b>

**Table E5.3: Calculation of biodiversity expenditure under MTEF Projection B**

	2013/14	2014/15	2015/16	2016/17
Average ratio of biodiversity expenditure to biodiversity budget, 2010/11 – 2012/13 (2)	0.897			
Biodiversity budget (2)	178.77	246.32	238.70	238.35
<b>Biodiversity expenditure: MTEF Projection B (2014/15 – 2016/17 [(1)*(2)*(3)]</b>	<b>160.45</b>	<b>221.07</b>	<b>214.23</b>	<b>213.92</b>

**Table E5.4: Calculation of biodiversity expenditure under MTEF Projection C**

	2013/14	2014/15	2015/16	2016/17
Average ratio of biodiversity expenditure to biodiversity budget, 2010/11 – 2012/13 (2)	0.854			
Biodiversity budget (2)	178.77	246.32	238.70	238.35
<b>Biodiversity expenditure: MTEF Projection B (2014/15 – 2016/17 [(1)*(2)*(3)]</b>	<b>152.70</b>	<b>210.39</b>	<b>203.88</b>	<b>203.59</b>

**Table E5.5: Estimates and projections of MFMR biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions)**

	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16	2016/ 17	2017/ 18	2018/ 19	2019/ 20	2020/ 21
Biodiversity Expenditure	101.49	91.81	121.40	151.18	215.67	173.28	173.65	-	-	-	-	-	-	-	-
Biodiversity Expenditure: MTEF Projection A	-	-	-	-	-	-	173.65	169.42	233.43	226.21	225.88	-	-	-	-
Biodiversity Expenditure: MTEF Projection B	-	-	-	-	-	-	173.65	160.45	221.07	214.23	213.92	-	-	-	-
Biodiversity Expenditure: MTEF Projection C	-	-	-	-	-	-	173.65	152.70	210.39	203.88	203.59	-	-	-	-
Biodiversity Expenditure: Scenario 1B	-	-	-	-	-	-	-	-	221.07	237.99	254.90	271.82	288.74	305.66	322.58
Biodiversity Expenditure: Scenario 2B	-	-	-	-	-	-	-	-	221.07	223.57	226.07	228.57	231.08	233.58	236.08
Biodiversity Expenditure: Scenario 3B	-	-	-	-	-	-	-	-	221.07	230.78	240.49	250.20	259.91	269.62	279.33
Biodiversity Expenditure: Scenario 4B	-	-	-	-	-	-	-	-	-	-	213.92	216.42	218.92	221.43	223.93

## F GRN Biodiversity Expenditure Review Supporting Data

### F1 GRN Biodiversity Expenditure, 2006/07 – 2012.13

**Table F1.1: Nominal GRN biodiversity expenditure, 2006/07 – 2012/13 (N\$ Millions)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
MET	110.46	167.73	174.50	253.75	221.91	290.14	319.97
MAWF	39.33	71.68	118.37	134.54	127.71	205.42	144.35
MFMR	101.49	91.81	121.40	151.18	215.67	173.28	173.65
MLR	1.91	5.18	6.82	16.08	6.59	7.58	7.73
MYNSSC	13.77	18.56	21.64	20.98	69.30	17.98	18.57
MME	6.76	7.15	7.71	7.78	10.78	11.01	11.48
MWTC	0.23	0.26	0.30	0.75	0.86	2.73	1.02
<b>Total</b>	<b>273.94</b>	<b>362.37</b>	<b>450.75</b>	<b>585.06</b>	<b>652.82</b>	<b>708.14</b>	<b>676.79</b>

**Table F1.2: Real GRN biodiversity expenditure, 2006/07 – 2012/13 (N\$ Millions 2013 prices)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
MET	173.38	246.74	232.74	311.05	260.31	324.14	335.65
MAWF	61.73	105.45	157.87	164.92	149.81	229.50	151.43
MFMR	159.30	135.06	161.91	185.32	253.00	193.59	182.16
MLR	3.01	7.61	9.10	19.71	7.73	8.46	8.11
MYNSSC	21.61	27.31	28.86	25.72	81.30	20.09	19.48
MME	10.61	10.52	10.28	9.54	12.65	12.30	12.05
MWTC	0.36	0.39	0.41	0.93	1.01	3.05	1.07
<b>Total</b>	<b>429.99</b>	<b>533.07</b>	<b>601.16</b>	<b>717.19</b>	<b>765.79</b>	<b>791.12</b>	<b>709.95</b>

**Table F1.3: Comparison of nominal expenditures, 2006/07 – 2012/13 (N\$ Millions)**

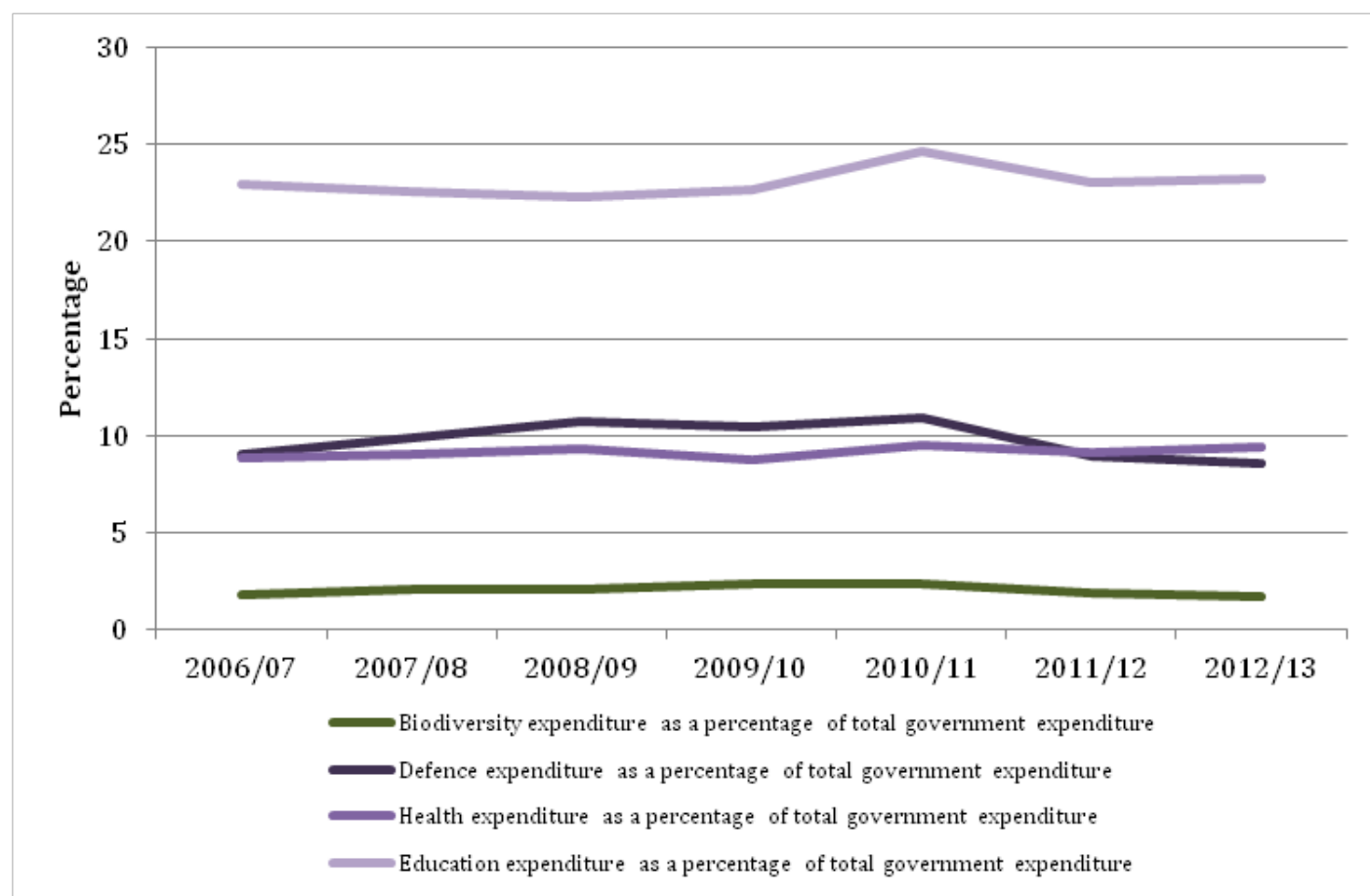
	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Total GRN Expenditure	15,279.18	17,383.3	21,944.85	24,908.93	27,552.72	36,742.71	40,072.98
Biodiversity expenditure	273.94	362.37	450.75	585.06	652.82	708.14	676.79
MoD Expenditure	1,375.26	-	2,350.12	2,595.06	3,006.34	3,274.97	3,414.42
MoHSS Expenditure	1,358.30	-	2,035.19	2,180.10	2,628.26	3,369.76	3,777.43
MoE Expenditure	3,498.29	-	4,889.39	5,650.84	6,788.88	8,462.42	9,307.80

The expenditure estimates were not available for MoD, MoHSS and MoE in 2007/08 because the Estimates of Revenue and Expenditure documents were not available for these Votes.

**Table D1.4: Comparison of expenditures as a percentage of total GRN expenditure, 2006/07 – 2012/13**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Biodiversity	1.79	2.08	2.05	2.35	2.37	1.93	1.69
MoD	9.00	-	10.71	10.42	10.91	8.91	8.52
MoHSS	8.89	-	9.27	8.75	9.54	9.17	9.43
MoE	22.90	-	22.28	22.69	24.64	23.03	23.23

**Figure D1.1: Estimated biodiversity expenditure and expenditures by MoD, MoHSS and MoE as a percentage of total GRN expenditure, 2006/07 – 2012/13**



## F2 GRN Biodiversity Expenditure, 2006/07 – 2020/21

**Table F2.1: Nominal GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions; Central Scenario)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
MET	110.46	167.73	174.50	253.75	221.91	290.14	319.97	376.34	432.58	465.46	498.34	531.23	564.11	597.00	629.88
MAWF	39.33	71.68	118.37	134.54	127.71	205.42	144.35	165.02	183.13	193.85	204.57	215.28	226.00	236.71	247.43
MFMR	101.49	91.81	121.40	151.18	215.67	173.28	173.65	160.45	221.07	230.78	240.49	250.20	259.91	269.62	279.33
MLR	1.91	5.18	6.82	16.08	6.59	7.58	7.73	8.00	8.26	8.53	8.80	9.07	9.34	9.61	9.88
MYNSSC	13.77	18.56	21.64	20.98	69.30	17.98	18.57	19.17	19.76	20.35	20.95	21.54	22.13	22.73	23.32
MME	6.76	7.15	7.71	7.78	10.78	11.01	11.48	11.96	12.44	12.91	13.39	13.87	14.34	14.82	15.30
MWTC	0.23	0.26	0.30	0.75	0.86	2.73	1.02	1.37	1.71	2.05	2.39	2.73	3.07	3.41	3.76
<b>Total</b>	<b>273.94</b>	<b>362.37</b>	<b>450.75</b>	<b>585.06</b>	<b>652.82</b>	<b>708.14</b>	<b>676.79</b>	<b>742.30</b>	<b>878.95</b>	<b>933.94</b>	<b>988.93</b>	<b>1043.92</b>	<b>1098.91</b>	<b>1153.90</b>	<b>1208.89</b>

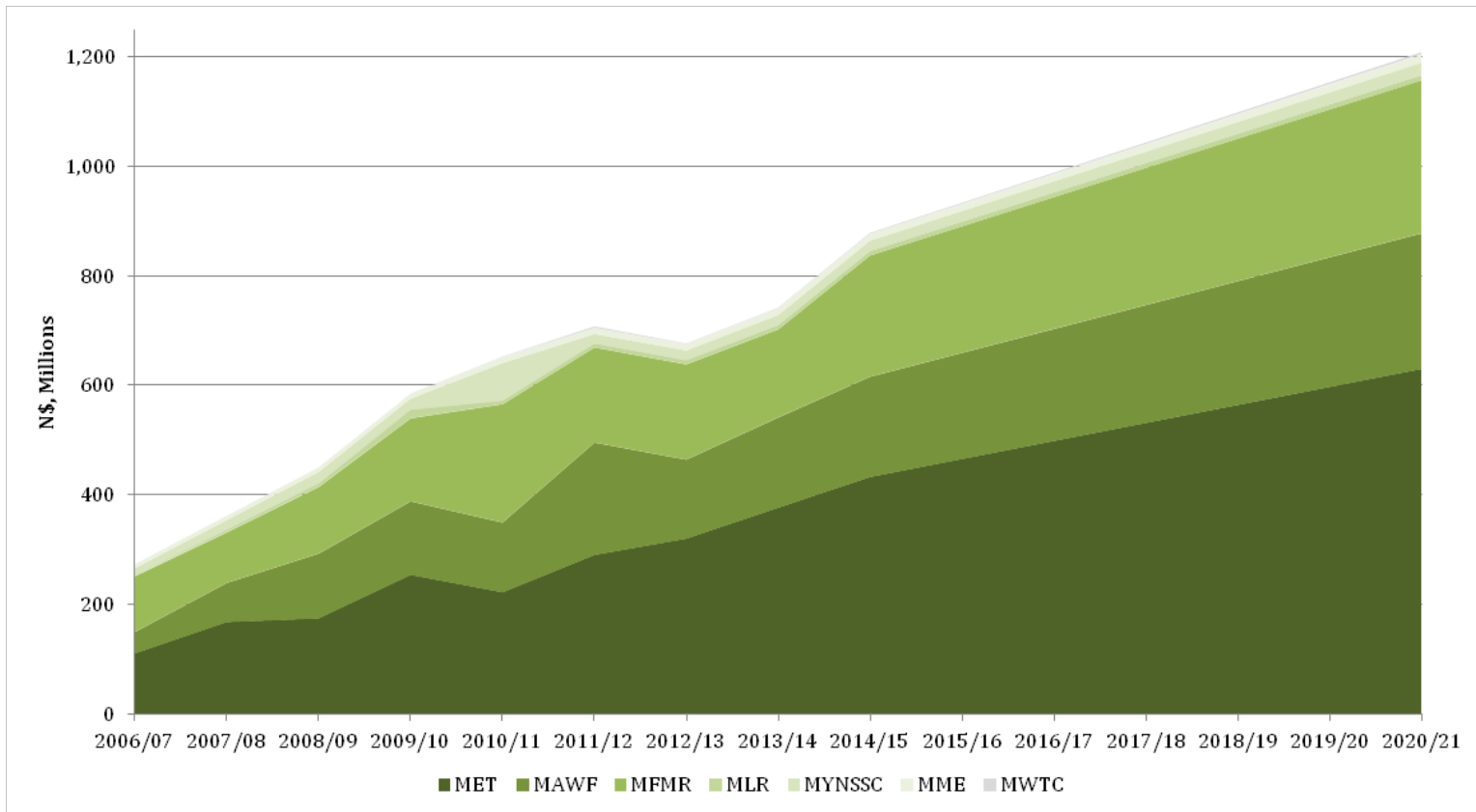
**Table F2.2: Nominal GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions; High Scenario)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
MET	110.46	167.73	174.50	253.75	221.91	290.14	319.97	376.34	432.58	481.61	530.64	579.68	628.71	677.74	726.78
MAWF	39.33	71.68	118.37	134.54	127.71	205.42	144.35	165.02	183.13	204.27	225.41	246.55	267.69	288.83	309.97
MFMR	101.49	91.81	121.40	151.18	215.67	173.28	173.65	160.45	221.07	237.99	254.90	271.82	288.74	305.66	322.58
MLR	1.91	5.18	6.82	16.08	6.59	7.58	7.73	8.00	8.26	8.53	8.80	9.07	9.34	9.61	9.88
MYNSSC	13.77	18.56	21.64	20.98	69.30	17.98	18.90	19.82	20.74	21.66	22.58	23.50	24.41	25.33	26.25
MME	6.76	7.15	7.71	7.78	10.78	11.01	12.30	13.59	14.88	16.17	17.45	18.74	20.03	21.32	22.61
MWTC	0.34	0.40	0.46	1.13	1.29	4.10	1.54	2.05	2.56	3.07	3.59	4.10	4.61	5.12	5.63
<b>Total</b>	<b>274.06</b>	<b>362.50</b>	<b>450.90</b>	<b>585.44</b>	<b>653.26</b>	<b>709.50</b>	<b>678.44</b>	<b>745.26</b>	<b>883.22</b>	<b>973.30</b>	<b>1,063.38</b>	<b>1,153.46</b>	<b>1,243.54</b>	<b>1,333.62</b>	<b>1,423.70</b>

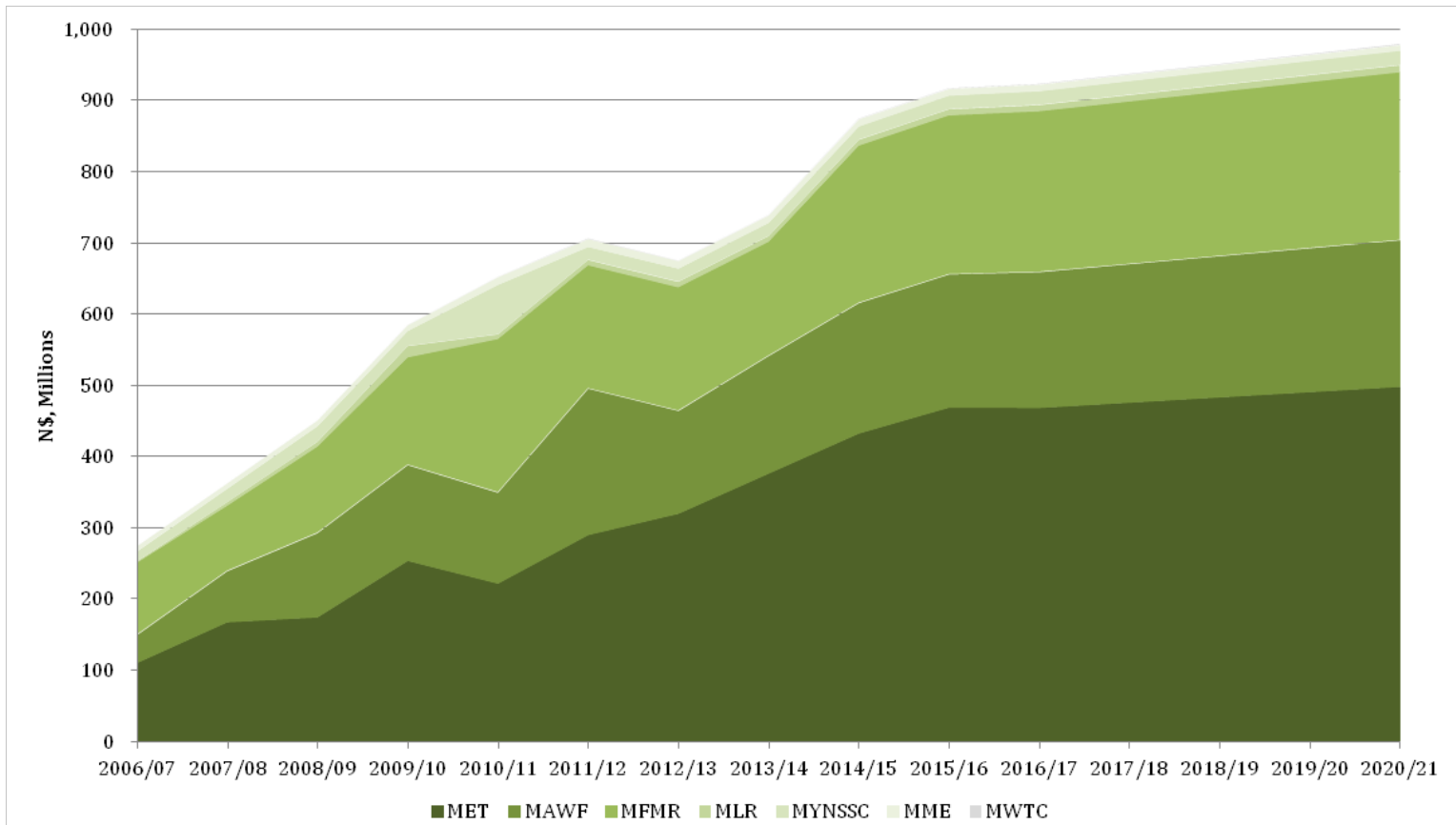
**Table F2.3: Nominal GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions; Low Scenario)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
MET	110.46	167.73	174.50	253.75	221.91	290.14	319.97	376.34	432.58	468.92	468.43	475.84	483.24	490.64	498.04
MAWF	39.33	71.68	118.37	134.54	127.71	205.42	144.35	165.02	183.13	186.91	190.69	194.46	198.24	202.01	205.79
MFMR	101.49	91.81	121.40	151.18	215.67	173.28	173.65	160.45	221.07	223.57	226.07	228.57	231.08	233.58	236.08
MLR	1.91	5.18	6.82	16.08	6.59	7.58	7.73	8.00	8.26	8.53	8.80	9.07	9.34	9.61	9.88
MYNSSC	13.77	18.56	21.64	20.98	69.30	17.98	18.25	18.52	18.78	19.05	19.32	19.59	19.86	20.12	20.39
MME	6.76	7.15	7.71	7.78	10.78	11.01	10.67	10.34	10.00	9.66	9.33	8.99	8.65	8.32	7.98
MWTC	0.07	0.08	0.09	0.23	0.26	0.82	0.31	0.41	0.51	0.61	0.72	0.82	0.92	1.02	1.13
<b>Total</b>	<b>273.78</b>	<b>362.18</b>	<b>450.53</b>	<b>584.54</b>	<b>652.22</b>	<b>706.23</b>	<b>674.93</b>	<b>739.07</b>	<b>874.34</b>	<b>917.26</b>	<b>923.36</b>	<b>937.34</b>	<b>951.32</b>	<b>965.31</b>	<b>979.29</b>

**Figure F2.1: Nominal GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions; High Scenario)**



**Figure F2.2: Nominal GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions; Low Scenario)**



**Table F2.4: Real GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions 2013 prices; Central Scenario, 6% Discount Rate)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
MET	173.38	246.74	232.74	311.05	260.31	324.14	335.65	376.34	408.09	414.26	418.42	420.78	421.54	420.86	418.91
MAWF	61.73	105.45	157.87	164.92	149.81	229.50	151.43	165.02	172.77	172.53	171.76	170.52	168.88	166.87	164.55
MFMR	159.30	135.06	161.91	185.32	253.00	193.59	182.16	160.45	208.55	205.39	201.92	198.18	194.22	190.07	185.77
MLR	3.01	7.61	9.10	19.71	7.73	8.46	8.11	8.00	7.80	7.59	7.39	7.18	6.98	6.77	6.57
MYNSSC	21.61	27.31	28.86	25.72	81.30	20.09	19.48	19.17	18.64	18.12	17.59	17.06	16.54	16.02	15.51
MME	10.61	10.52	10.28	9.54	12.65	12.30	12.05	11.96	11.73	11.49	11.24	10.98	10.72	10.45	10.17
MWTC	0.36	0.39	0.41	0.93	1.01	3.05	1.07	1.37	1.61	1.82	2.01	2.16	2.30	2.41	2.50
<b>Total</b>	<b>429.99</b>	<b>533.07</b>	<b>601.16</b>	<b>717.19</b>	<b>765.79</b>	<b>791.12</b>	<b>709.95</b>	<b>742.30</b>	<b>829.20</b>	<b>831.20</b>	<b>830.32</b>	<b>826.88</b>	<b>821.17</b>	<b>813.45</b>	<b>803.98</b>

**Table F2.5: Real GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions 2013 prices; High Scenario, 6% Discount Rate)**

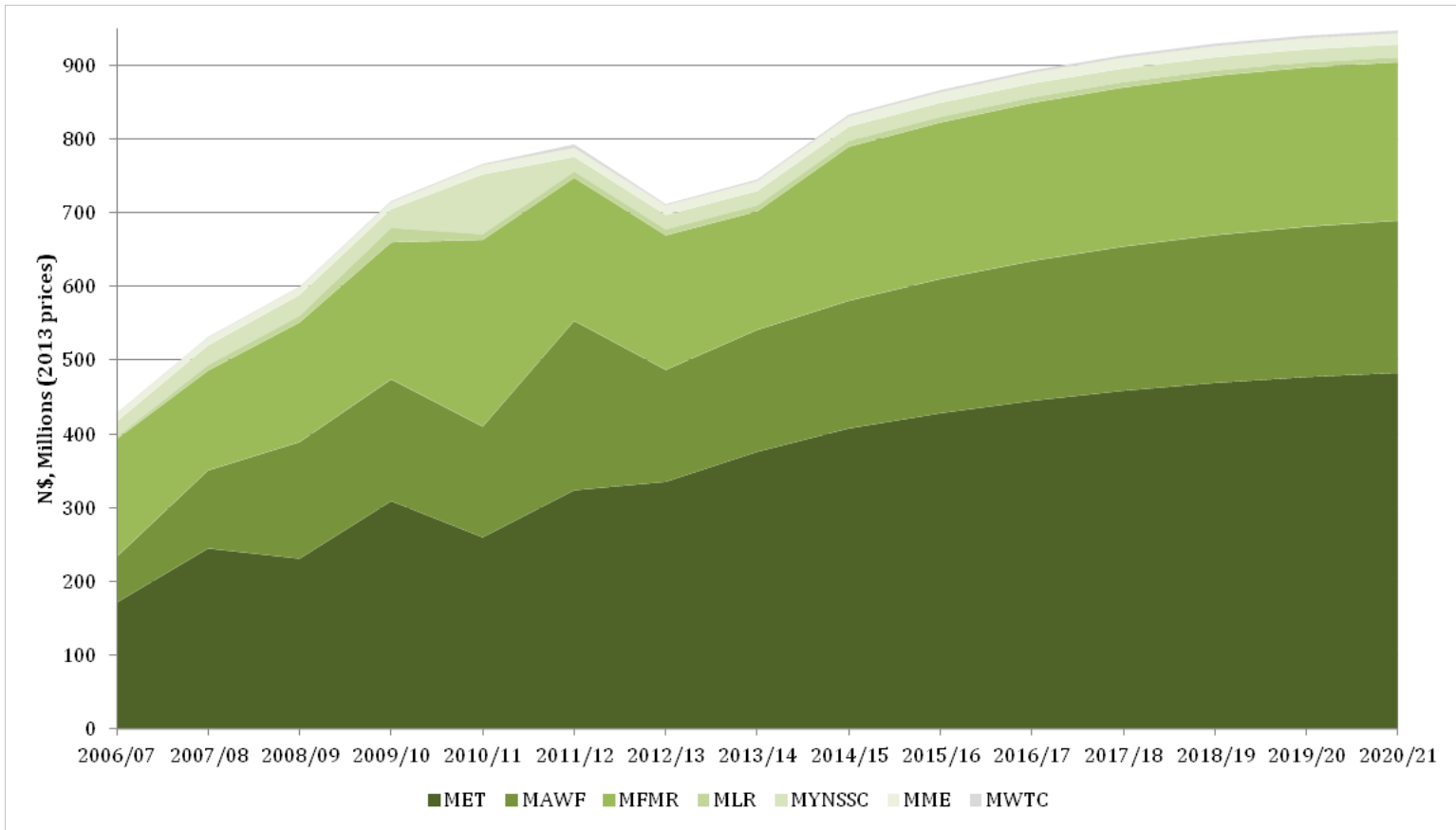
	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
MET	173.38	246.74	232.74	311.05	260.31	324.14	335.65	376.34	408.09	428.63	445.54	459.16	469.81	477.78	483.35
MAWF	61.73	105.45	157.87	164.92	149.81	229.50	151.43	165.02	172.77	181.80	189.26	195.29	200.03	203.61	206.15
MFMR	159.30	135.06	161.91	185.32	253.00	193.59	182.16	160.45	208.55	211.81	214.02	215.31	215.76	215.48	214.53
MLR	3.01	7.61	9.10	19.71	7.73	8.46	8.11	8.00	7.80	7.59	7.39	7.18	6.98	6.77	6.57
MYNSSC	21.61	27.31	28.86	25.72	81.30	20.09	19.83	19.82	19.56	19.27	18.96	18.61	18.24	17.86	17.46
MME	10.61	10.52	10.28	9.54	12.65	12.30	12.90	13.59	14.03	14.39	14.66	14.85	14.97	15.03	15.04

MWTC	0.54	0.58	0.61	1.39	1.52	4.58	1.61	2.05	2.42	2.74	3.01	3.25	3.44	3.61	3.75
<b>Total</b>	<b>430.17</b>	<b>533.27</b>	<b>601.37</b>	<b>717.65</b>	<b>766.30</b>	<b>792.65</b>	<b>711.68</b>	<b>745.26</b>	<b>833.22</b>	<b>866.23</b>	<b>892.83</b>	<b>913.65</b>	<b>929.24</b>	<b>940.15</b>	<b>946.84</b>

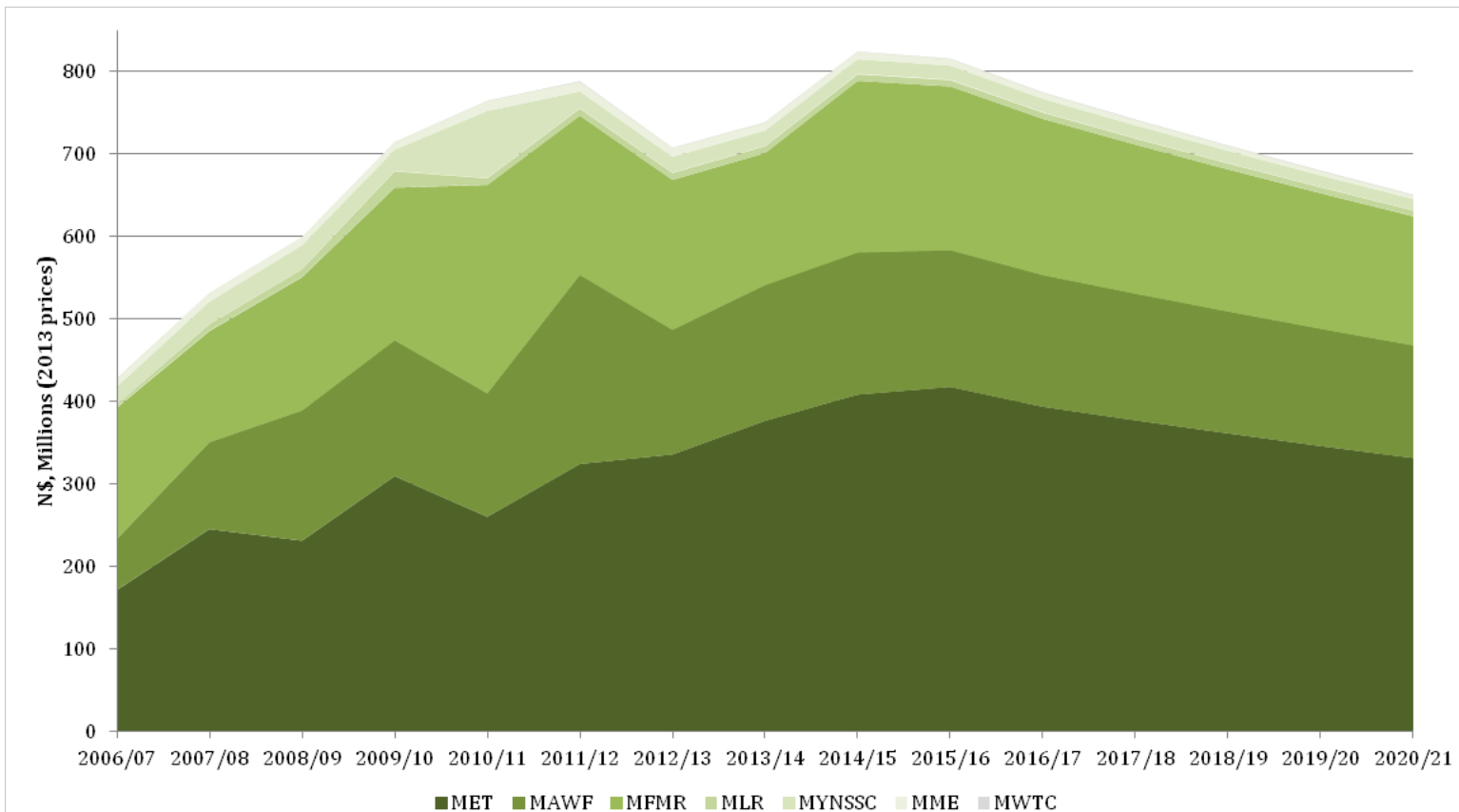
**Table F2.6: Real GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions 2013 prices; Low Scenario, 6% Discount Rate)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
MET	173.38	246.74	232.74	311.05	260.31	324.14	335.65	376.34	408.09	417.34	393.31	376.91	361.10	345.88	331.23
MAWF	61.73	105.45	157.87	164.92	149.81	229.50	151.43	165.02	172.77	166.35	160.10	154.03	148.13	142.41	136.86
MFMR	159.30	135.06	161.91	185.32	253.00	193.59	182.16	160.45	208.55	198.98	189.81	181.05	172.67	164.66	157.01
MLR	3.01	7.61	9.10	19.71	7.73	8.46	8.11	8.00	7.80	7.59	7.39	7.18	6.98	6.77	6.57
MYNSSC	21.61	27.31	28.86	25.72	81.30	20.09	19.14	18.52	17.72	16.96	16.22	15.52	14.84	14.19	13.56
MME	10.61	10.52	10.28	9.54	12.65	12.30	11.19	10.34	9.43	8.60	7.83	7.12	6.47	5.86	5.31
MWTC	0.11	0.12	0.12	0.28	0.30	0.92	0.32	0.41	0.48	0.55	0.60	0.65	0.69	0.72	0.75
<b>Total</b>	<b>429.74</b>	<b>532.80</b>	<b>600.88</b>	<b>716.54</b>	<b>765.08</b>	<b>788.99</b>	<b>708.00</b>	<b>739.07</b>	<b>824.85</b>	<b>816.36</b>	<b>775.27</b>	<b>742.46</b>	<b>710.88</b>	<b>680.50</b>	<b>651.28</b>

**Figure F2.3: Real GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions; High Scenario, 6% Discount Rate)**



**Figure F2.4: Real GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions; Low Scenario, 6% Discount Rate)**



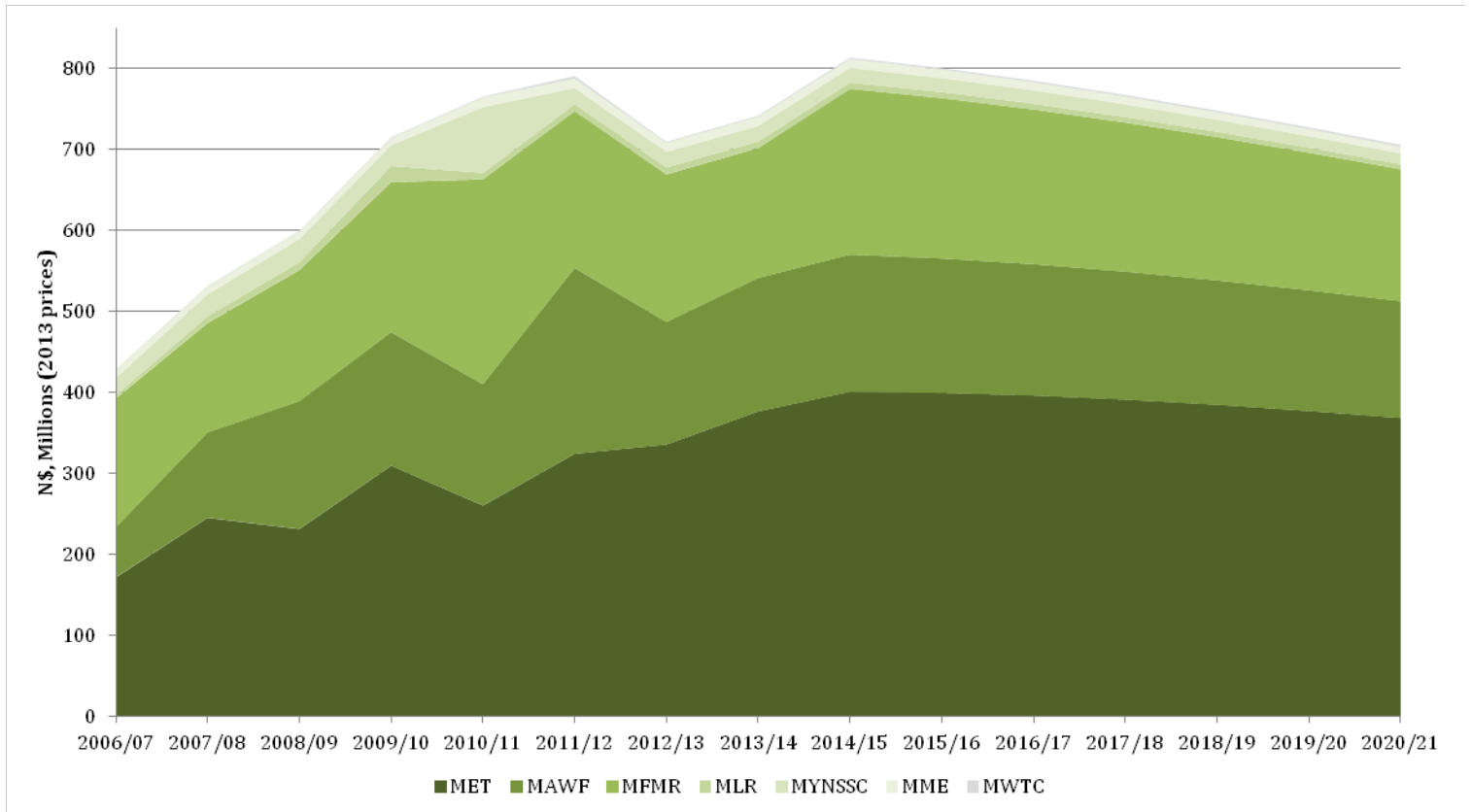
**Table F2.7: Real GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions 2013 prices; Central Scenario, 8% Discount Rate)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
MET	173.38	246.74	232.74	311.05	260.31	324.14	335.65	376.34	400.53	399.06	395.60	390.47	383.93	376.21	367.53
MAWF	61.73	105.45	157.87	164.92	149.81	229.50	151.43	165.02	169.57	166.20	162.39	158.24	153.81	149.17	144.37
MFMR	159.30	135.06	161.91	185.32	253.00	193.59	182.16	160.45	204.69	197.85	190.91	183.90	176.89	169.91	162.99
MLR	3.01	7.61	9.10	19.71	7.73	8.46	8.11	8.00	7.65	7.32	6.99	6.67	6.36	6.05	5.76
MYNSSC	21.61	27.31	28.86	25.72	81.30	20.09	19.48	19.17	18.30	17.45	16.63	15.83	15.06	14.32	13.61
MME	10.61	10.52	10.28	9.54	12.65	12.30	12.05	11.96	11.52	11.07	10.63	10.19	9.76	9.34	8.92
MWTC	0.36	0.39	0.41	0.93	1.01	3.05	1.07	1.37	1.58	1.76	1.90	2.01	2.09	2.15	2.19
<b>Total</b>	<b>429.99</b>	<b>533.07</b>	<b>601.16</b>	<b>717.19</b>	<b>765.79</b>	<b>791.12</b>	<b>709.95</b>	<b>742.30</b>	<b>813.84</b>	<b>800.70</b>	<b>785.04</b>	<b>767.31</b>	<b>747.90</b>	<b>727.15</b>	<b>705.38</b>

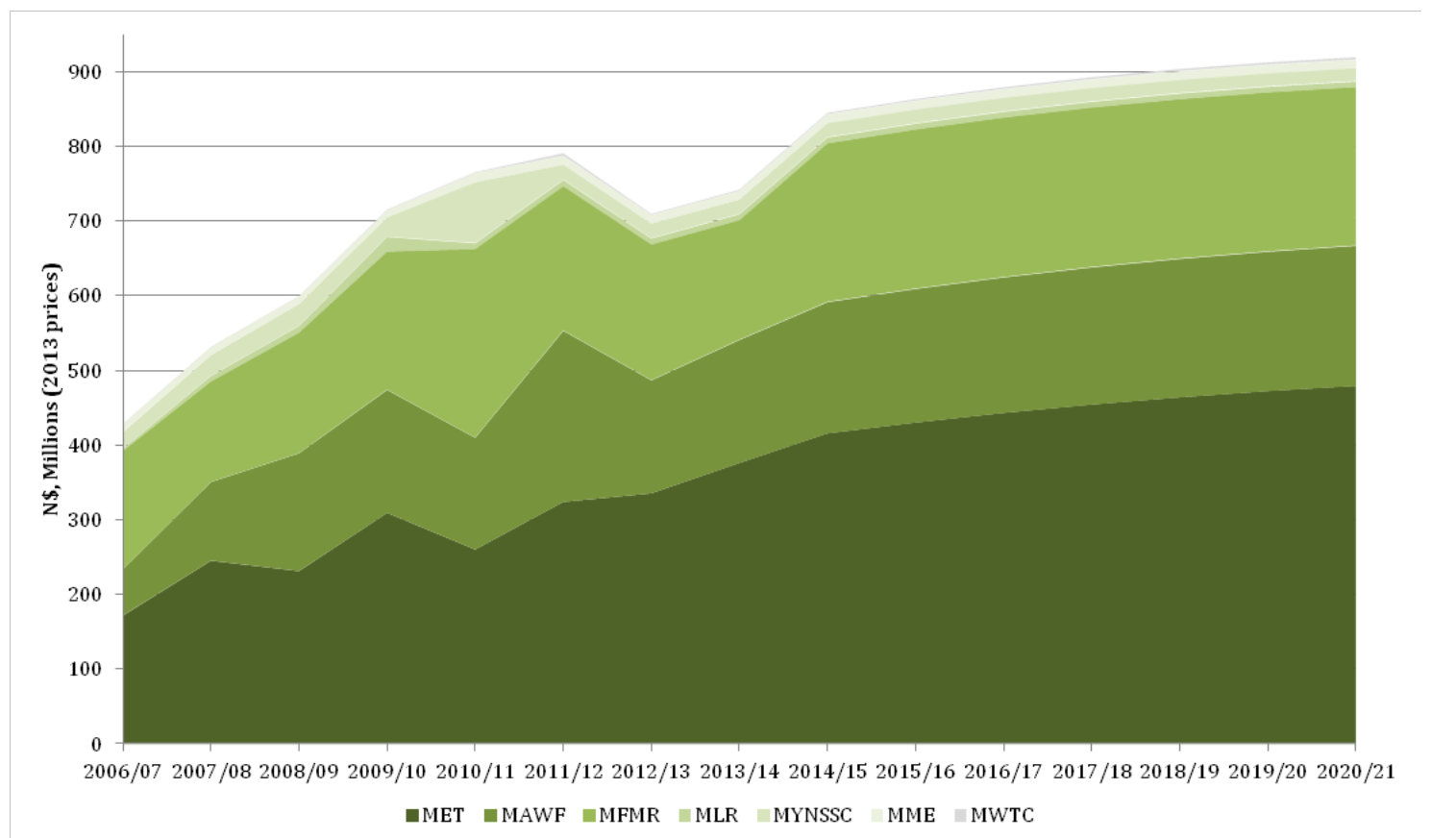
**Table F2.8: Real GRN biodiversity expenditure, 2006/07 – 2020/21 (N\$ Millions 2013 prices; Central Scenario, 4% Discount Rate)**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
MET	173.38	246.74	232.74	311.05	260.31	324.14	335.65	376.34	415.94	430.34	443.03	454.10	463.66	471.82	478.66
MAWF	61.73	105.45	157.87	164.92	149.81	229.50	151.43	165.02	176.09	179.23	181.86	184.02	185.75	187.08	188.02
MFMR	159.30	135.06	161.91	185.32	253.00	193.59	182.16	160.45	212.56	213.37	213.79	213.87	213.63	213.08	212.27
MLR	3.01	7.61	9.10	19.71	7.73	8.46	8.11	8.00	7.95	7.89	7.83	7.75	7.68	7.59	7.51
MYNSSC	21.61	27.31	28.86	25.72	81.30	20.09	19.48	19.17	19.00	18.82	18.62	18.41	18.19	17.96	17.72
MME	10.61	10.52	10.28	9.54	12.65	12.30	12.05	11.96	11.96	11.94	11.90	11.85	11.79	11.71	11.62
MWTC	0.36	0.39	0.41	0.93	1.01	3.05	1.07	1.37	1.64	1.89	2.12	2.34	2.53	2.70	2.85
<b>Total</b>	<b>429.99</b>	<b>533.07</b>	<b>601.16</b>	<b>717.19</b>	<b>765.79</b>	<b>791.12</b>	<b>709.95</b>	<b>742.30</b>	<b>845.14</b>	<b>863.48</b>	<b>879.15</b>	<b>892.35</b>	<b>903.22</b>	<b>911.94</b>	<b>918.66</b>

**Figure F2.5: Real GRN biodiversity expenditure, 2006/07 – 2020/21  
(N\$ Millions; Central Scenario, 8% Discount Rate)**



**Figure F2.6: Real GRN biodiversity expenditure, 2006/07 – 2020/21  
(N\$ Millions 2013 prices; Central Scenario, 4% Discount Rate)**



**Table F2.9: Estimated and projected biodiversity expenditure as a percentage of total GRN expenditure, 2006/07 – 2016/17**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Biodiversity expenditure as a percentage of total GRN expenditure	1.79	2.08	2.05	2.35	2.37	1.93	1.69	-	-	-	-
Projected biodiversity expenditure as a percentage of forecast total GRN expenditure (central)	-	-	-	-	-	-	-	1.56	1.46	1.46	1.42
Projected biodiversity expenditure as a percentage of forecast total GRN expenditure (high)	-	-	-	-	-	-	-	1.57	1.47	1.52	1.53
Projected biodiversity expenditure as a percentage of forecast total GRN expenditure (low)	-	-	-	-	-	-	-	1.55	1.45	1.43	1.33

**Table F2.10: Estimated and projected biodiversity expenditure as a percentage of total GRN expenditure, 2006/07 – 2016/17**

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Biodiversity expenditure as a percentage of total GRN expenditure	0.57	0.57	0.60	0.73	0.78	0.76	0.61	-	-	-	-
Projected biodiversity expenditure as a percentage of forecast total GRN expenditure (central)	-	-	-	-	-	-	-	0.64	0.62	0.58	0.54
Projected biodiversity expenditure as a percentage of forecast total GRN expenditure (high)	-	-	-	-	-	-	-	0.64	0.63	0.61	0.58
Projected biodiversity expenditure as a percentage of forecast total GRN expenditure (low)	-	-	-	-	-	-	-	0.63	0.62	0.57	0.51

# G BIOFIN Workbook 1C

## WORKBOOK 1C: Public and Private Biodiversity Expenditures and Effectiveness Status and Trends

### SECTION 1: OVERALL NATIONAL BUDGETARY AND EXPENDITURE SNAPSHOT

	2006	2007	2008	2009	2010	2011	2012	2013
Total government budget	15,288	17,827	21,276	24,875	27,744	37,166	40,073	47,576
Total government expenditure	15,279	17,383	21,945	24,909	27,553	36,743	40,073	47,576
Gross domestic product	48,228	63,217	74,579	80,065	83,568	93,559	110,791	116,444

### SECTION 2: BASELINE BIODIVERSITY-RELATED EXPENDITURE AND EXPENDITURE EFFECTIVENESS REVIEW

PUBLIC AND PRIVATE AGENCIES, ACTORS, INSTITUTIONS AND INVESTORS THAT FUND BIODIVERSITY-RELATED ACTIONS (From Workbook 1b)	General sector or agency	Specific division, department or company	Total budget in years 1-6	Total biodiversity-related budget in years 1-6	Total actual expenditures in years 1-6	Total actual expenditures on biodiversity in years 1-6	Effectiveness of biodiversity-related expenditures	Negative biodiversity expenditures
MET	GRN	N/A	2,996.11	1,848.39	2,801.28	1,710.63	N/A	N/A
MAWF	GRN	N/A	10,206.66	1,046.55	9,122.13	814.54	N/A	N/A
MFMR	GRN	N/A	1,701.68	1,253.94	1,502.56	1,111.03	N/A	N/A
MLR	GRN	N/A	1,390.34	69.54	1,294.65	60.73	N/A	N/A
MYNSSC	GRN	N/A	2,864.13	204.60	10,227.67	202.74	N/A	N/A
MME	GRN	N/A	1,204.04	77.50	1,080.01	67.33	N/A	N/A
MWTC	GRN	N/A	10,728.37	6.83	10,447.36	6.83	N/A	N/A
GEF	Donor	N/A	N/A	N/A	N/A	449.80	N/A	N/A
US Govt	Donor	N/A	N/A	N/A	N/A	485.67	N/A	N/A
German Govt	Donor	N/A	N/A	N/A	N/A	143.93	N/A	N/A
WWF	Donor	N/A	N/A	N/A	N/A	25.90	N/A	N/A
EU	Donor	N/A	N/A	N/A	N/A	14.29	N/A	N/A
FAO	Donor	N/A	N/A	N/A	N/A	5.13	N/A	N/A
SASSCAL	Research	N/A	N/A	N/A	N/A	0.00	N/A	N/A
Other Donor Funds	Donor	N/A	N/A	N/A	N/A	35.81	N/A	N/A
NedBank	Private	N/A	N/A	N/A	N/A	4.09	N/A	N/A
Private Landholders	Private	N/A	N/A	N/A	N/A	490.11	N/A	N/A
Data sources and assumptions								
<b>TOTALS</b>	<b>N/A</b>	<b>N/A</b>				<b>5,628.58</b>	<b>N/A</b>	<b>N/A</b>

**SECTION 3: BASELINE BIODIVERSITY EXPENDITURE REVIEW BY MAJOR STRATEGY GROUP**

PUBLIC AND PRIVATE AGENCIES, ACTORS, INSTITUTIONS AND INVESTORS THAT FUND BIODIVERSITY-RELATED ACTIONS	Source of funding	Total biodiversity expenditure	Biodiversity mainstreaming and sustainable use strategies	Protection strategies	Restoration strategies	ABS strategies	Implementation strategies	All other biodiversity strategies
MET	GRN	1,710.63	146.11	1,305.17	7.53	205.20	46.62	0.00
MAWF	GRN	814.54	53.10	214.29	450.25	70.30	171.20	0.00
MFMR	GRN	1,111.03	24.93	398.81	354.33	0.00	332.97	0.00
MLR	GRN	60.73	0.00	0.00	22.77	22.77	15.18	0.00
MYNSSC	GRN	202.74	0.00	0.00	0.00	0.00	202.76	0.00
MME	GRN	67.33	0.00	0.00	67.34	0.00	0.00	0.00
MWTC	GRN	6.83	2.29	2.29	2.29	0.00	0.00	0.00
GEF	Donor	449.80	20.35	165.96	163.93	129.32	73.61	0.00
US Govt	Donor	485.67	0.00	295.53	40.19	149.46	0.49	0.00
German Govt	Donor	143.93	12.90	70.10	12.90	35.12	12.90	0.00
WWF	Donor	25.90	0.00	8.63	0.00	8.63	8.63	0.00
EU	Donor	14.29	0.00	1.68	0.00	12.62	0.00	0.00
FAO	Donor	5.13	0.00	1.41	1.70	1.70	0.31	0.00
SASSCAL	Donor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Donor Funds	Donor	35.81	0.00	11.94	0.00	11.94	11.94	0.00
NedBank	Private	4.09	0.00	1.36	0.00	1.36	1.36	0.00
Private Landholders	Private	490.11	0.00	490.11	0.00	0.00	0.00	0.00
Data sources and assumptions								
<b>TOTALS</b>		<b>5,628.56</b>	<b>259.68</b>	<b>2,967.28</b>	<b>1,123.23</b>	<b>648.42</b>	<b>877.97</b>	<b>0.00</b>

**SECTION 4: ESTIMATED FUTURE FUNDING BASELINE UNDER A 'BUSINESS AS USUAL' SCENARIO**

	2014	2015	2016	2017	2018	2019	2020	TOTALS
Mainstreaming strategies	66.06	65.61	63.27	52.59	52.37	50.66	50.25	66.06
Protection strategies	736.28	685.55	691.96	674.43	630.71	606.41	582.52	736.28
Restoration strategies	170.13	161.31	156.74	150.52	148.20	144.31	140.04	170.13
ABS strategies	81.50	59.48	73.01	59.07	57.58	56.07	35.96	81.50
Implementation strategies	127.26	121.32	116.53	105.07	102.79	99.08	96.73	127.26
All other related strategies								
<b>TOTALS</b>	<b>1,181.23</b>	<b>1,093.26</b>	<b>1,101.51</b>	<b>1,041.68</b>	<b>991.65</b>	<b>956.53</b>	<b>905.49</b>	<b>1,181.23</b>
Data sources and assumptions								

Notes: As discussed in the report, effectiveness and negative expenditures are not assessed. Total budget and expenditure data for non-GRN actors is not assessed due to time constraints. Data and assumptions underlying the calculations are detailed in the main report.

