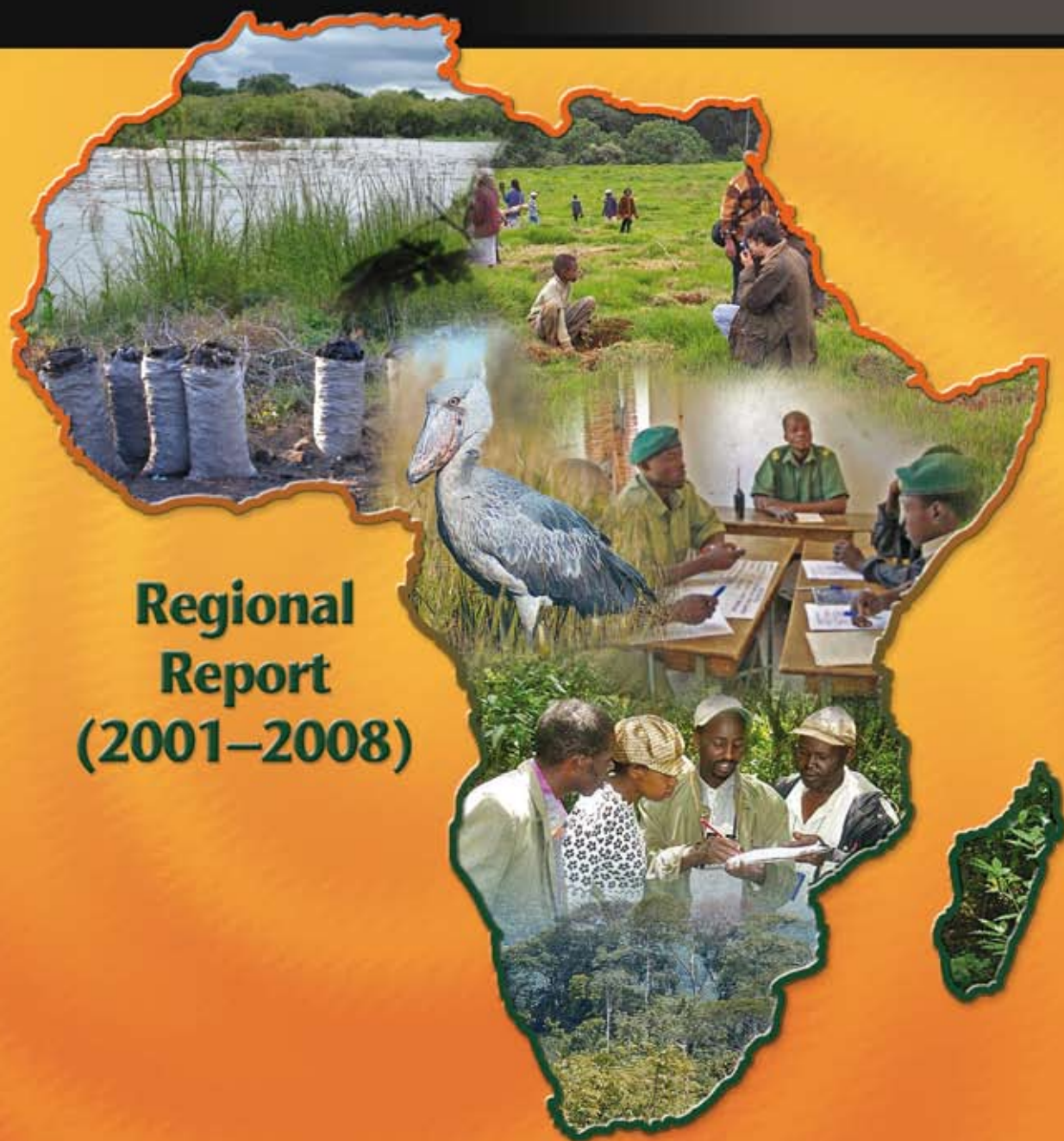


Tracking the Status and Trends of Biodiversity in Africa's Protected Areas as a Contribution to Reducing the Rate of Biodiversity Loss



Regional Report (2001–2008)

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ABOUT BIRDLIFE INTERNATIONAL

BirdLife International is a global partnership of NGO's striving to conserve birds, their habitats, and global biodiversity, working with people, towards sustainable use of natural resources. Currently, the partnership works in more than 100 countries organised under six regional groupings. In Africa, the BirdLife Africa Partnership is a growing network of 22NGOs. Partners are involved in research, conservation action, environmental education and sustainable development through a broad agenda focusing not only on birds but also on other fauna and flora and social issues such as poverty alleviation. All BirdLife Africa Policies and programmes are formulated and supervised by the Council of the Africa Partnership (CAP) comprised of heads of the members NGOs.

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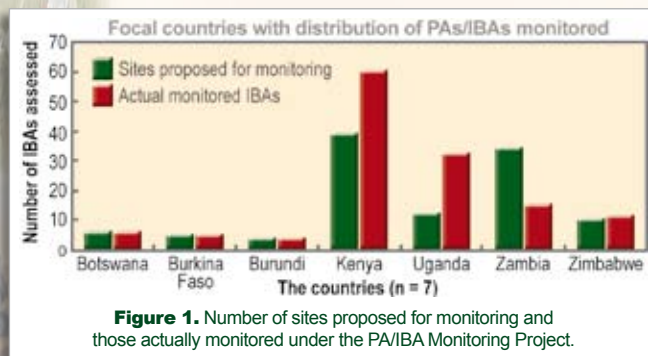
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Important Bird Areas (IBAs) form a global network of more than 10,000 sites crucial for maintaining overall ranges and populations of a large proportion of the world's bird species. IBAs are a major part of the larger network of key biodiversity areas – the most important sites for the conservation of wider biodiversity worldwide. In order to assess their contribution at conserving birds and to act as an early-warning system for problems, BirdLife has developed a framework for monitoring IBAs, using a state-pressure-response model. This is now being implemented at IBAs across the world. One of the uses of the data generated from IBA monitoring is the production of indicators which show trends over time in the state of, pressures to and conservation responses at IBAs, at the national, regional and indeed global scales. Such indicators form an important component of the suite of indicators needed to track the state of biodiversity, progress towards the 2010 (and subsequent) biodiversity targets, and sustainable development.

Many IBAs are also Protected Areas (PAs). For these, IBA monitoring data can therefore provide information of

how effective these are in meeting their wider conservation objectives. In order to assess this contribution, the BirdLife/RSPB PA/IBA Monitoring Project funded by the European Commission, was established. Under its auspices, in 2008 'baseline' scores were awarded, for each of state, pressure and response, for how things were in 2001, using a 'back-casting method', for 142 Protected Areas/IBAs (BirdLife International, 2008). Subsequent site-level monitoring activities led to the production of the National Status and Trends Reports in 2008, covering 117 of these sites across seven African countries, namely Botswana, Burkina Faso, Burundi, Kenya, Uganda, Zambia and Zimbabwe¹.

All the selected IBAs are designated as Protected Areas according to IUCN categories I–IV². As shown in Figure 1, the number of sites at which monitoring was planned under the PA/IBA Monitoring Project differs somewhat from those actually monitored in some countries. In Kenya and Uganda coverage exceeds the target, while in Zambia, 17 out of a targeted 35 IBAs are being monitored. The intended target is 163 sites, of which currently 117 are being monitored. It is anticipated that more sites will be added in order to reach the intended target. This therefore is the first consolidated report in which the 2001 and 2008 trend in condition is being compared. The report also seeks answers to questions on whether there is an increase or decline in the threats facing Africa's Protected Areas and what the difference is in the level of conservation actions between 2001 and 2008.



¹ References are: Association Burundaise pour la protection des Oiseaux (2009); Burundi's Important Bird Areas (2009), Status and Trends in 2008; BirdLife Botswana (2009); 2008 Status Report for Protected Important Bird Areas in Botswana; Fondation Des la Amis la Nature- Naturama (2009); Zones d'Importances pour la Conservation des Oiseaux (ZICO) du Burkina Faso; Statuts et Tendances 2008; Nature Kenya – The East Africa Natural History Society – 2009 (2008); Kenya's Important Bird Areas Status and Trends 2008; Nature Uganda (2009); IMPORTANT BIRD AREAS IN UGANDA- Status and Trends 2008; Zambian Ornithological Society (2009); 2008 IBA Status and Trends Report, Zambia; BirdLife Zimbabwe (2009); Zimbabwe's Important Bird Areas: National Status Report 2008.

² This project uses the definition of a protected area adopted by IUCN, which is: 'An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.'

2.1 Process

BirdLife International developed a baseline status of the sites condition, threats and conservation interventions as of 2001, largely based on the information contained in FishPool and Evans (2001) and after consultation and verification with the stakeholders at national level. This was followed by targeted training of site monitoring teams, comprising mainly the Protected Area personnel. The countries then developed and customised the IBA data collection forms to their country situations using the BirdLife International IBA Global IBA Monitoring Framework as a guide. This was to ensure ownership of the monitoring process amongst the various stakeholders, with the logos of the key institutions placed on the forms to foster identity. Customisation facilitated the simplification of the forms, while at the same ensuring that the scientific detail required for analyses was not lost. The IBA data collection forms – which were both in electronic and hard copy form were then distributed to potential contributors, who were mainly trained Protected Area management authorities, researchers and other partners, bird watchers and to some extent community-based groups known as Site Support Groups (SSGs). Considering that these are Protected Areas and the SSGs have limited access, their monitoring work is restricted to parts of the IBA that are outside Protected Areas.

The IBA data collection forms have a list of a various possible indicators under the State, Pressure and Response. The process of determining which pressures are impacting on the site, using a standard list given in the monitoring form, sensitises field staff to threats other than those with which they have traditionally dealt with, for example burning, felling and poaching. In the implementation of this project, comments have previously been made that whilst rangers are generally aware of the main threats

impacting on their site, the monitoring form requires them to work methodically through a wider list of possible threats, and to record, on a particular date, their apparent impacts on the site.

Noting the diversity of stakeholders engaged in completing the monitoring forms, it is needless to say that more than one monitoring form per site is completed and submitted to the designated Coordinator. The Coordinator/s then verified and assessed the submitted forms for consistency and then collated them, along with other relevant information on the status of particular sites, including from satellite images, scientific and popular publications, official journals and gazettes, and the results of any other monitoring that may have been undertaken (e.g. for the International Waterfowl Census). Finally, the Coordinator/s applied the standardised methodology to the available information, and, in consultation with other experts, assigned scores for State, Pressure and Response for each site using a methodology developed by the BirdLife International (2006). Data recorded by field observers was entered into the World Biodiversity Database by individuals at designated institutions and the assessments on datasheets automated into impact scores ranging from 0–3. As part of BirdLife Africa’s regional efforts, the staff members that assessed the data sheets were trained in the use of management of data by data experts at the Royal Society for the Protection of Birds, BirdLife Africa Partnership Secretariat and BirdLife International Global Office in Cambridge.

In the process mentioned above, the IBA monitoring project emphasises quality control and effectiveness. This includes- accuracy and precision, avoiding bias, clear definition of the parameters to be measured, scale used should be standard in space and time. Avoiding being over ambitious- measure what you feasibly can, avoiding ambiguity i.e. using photos to



refer to standard habitat categorisation, use photographic monitoring where possible.

2.2 Calculating Scores

The monitoring involves assessing the Status of selected indicators of state (species for which the site was identified as an IBA or, as a proxy, the habitats they use), pressures (threats) and responses (interventions) at IBAs (Bennun, 2003). Details of scoring State, Pressure and Response differ, but the resulting scales are the same; Status scores for each are assigned on a simple 4-point scale, from 0 to 3 (BirdLife International, 2006).

2.2.1 Calculating scores for State

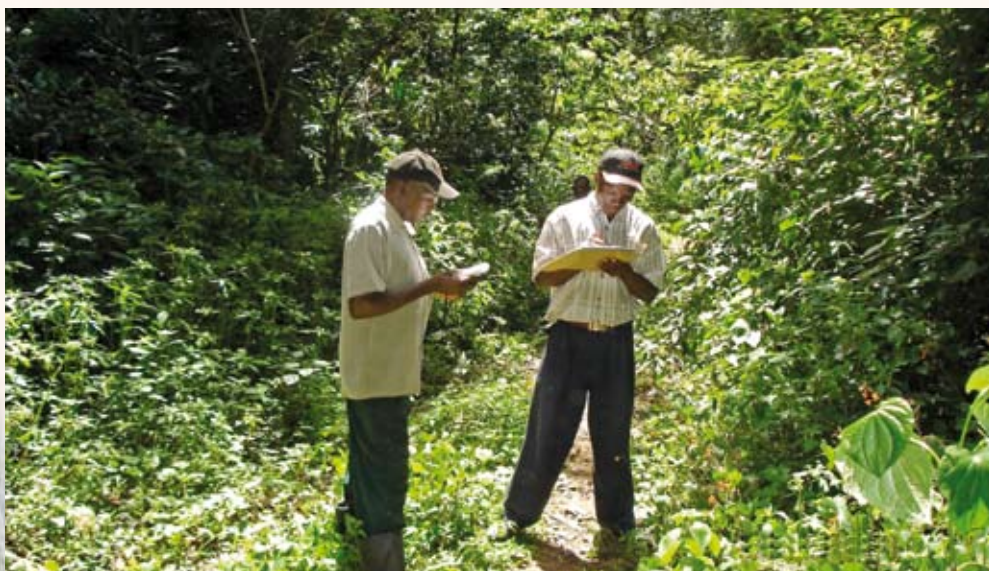
State can be assessed based on the population sizes of the trigger species, i.e. those species for which the site is recognized as an IBA) or on the extent and condition of the habitats they use. Each species or habitat is scored independently. Using a 'weakest link' approach, a status score is assigned based on the species/habitat with the 'worst' status. The IBA condition status scores are as follows: 3 = good; 2 = moderate; 1 = poor; 0 = very poor.

2.2.2 Calculating scores for Pressures

Pressures or threats are assessed by scoring information on the timing, scope and severity of each threat. Timing refers to the period (now or future) a particular threat is occurring. Scope refers to the extent of coverage across the site while severity refers to the scale of the resultant effect of the threat. Timing, scope and severity scores are then combined to give threat impact scores for each threat. Then, again using the weakest link approach, the threat with the highest impact is used to assign the threat status score for the whole IBA, as follows: 3 = Good; 2 = Moderate; 1 = Poor and 0 = Very Poor.

2.2.3 Calculating scores for Responses

Response is assessed by scoring separately each of the degree to which the site is designated for conservation, the adequacy of the management planning and level of conservation effort for an IBA. Each of these are also scored on a scale of 0-3, with the sum then converted onto a further 0-3 scale, to give the overall site response status score: 3 = High; 2 Medium = 1 = Low; and 0 = negligible.



Data Collection in Kakamega Forest – Kenya (@NatureKenya)

3.1 State

Key Question 1: What is the trend information on biodiversity in Africa's Protected Areas between 2001 and 2008?

In the countries where monitoring activities took place in 2008, the State scores for at least 114 sites have remained unchanged or declined since 2001. The exception is in Botswana, where the mean condition of at least three sites namely Central Kalahari Game Reserve, Okavango Delta and Mannyelanong PAs/IBAs has improved.

Figure 3 shows the average State scores for the seven countries in 2001/2008. The monitoring data is indicating that there has been a decline in the condition status scores over this period, implying that biodiversity might

be showing similar trends apart from Botswana.

Overall, between 2001 and 2008, there was a decline in the Status of PAs/IBAs, with the proportion scored as being in a Poor state increasing from 43 to 57% (Figure 4).

3.2 Pressure

Key Question 2: Has there been an increase or decline in the threats facing Africa's Protected Areas?

Pressure scores recorded in most countries in 2008 were, in general, higher than those in 2001, as illustrated in Figure 5.

Figure 6 shows the average scores for pressure in the selected seven countries in 2001/2008. This illustrates that overall threats have increased over this period.

3.3 Response

Key Question 3: What is the difference in the level of conservation actions between 2001 and 2008?

Figure 7 shows that, in general conservation responses have

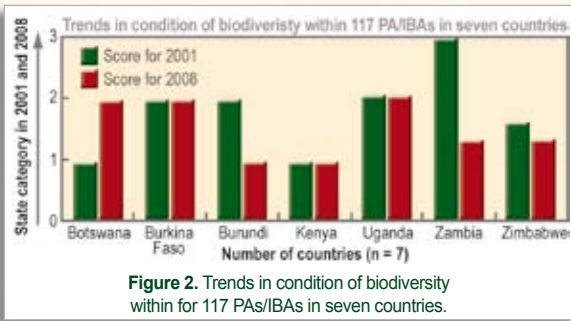


Figure 2. Trends in condition of biodiversity within for 117 PAs/IBAs in seven countries.

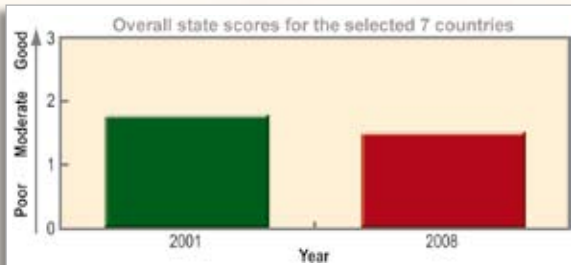


Figure 3. Average State scores for 117 PAs/IBAs in seven countries.



Figure 5. Pressure scores for 117 PAs/IBAs in seven countries.

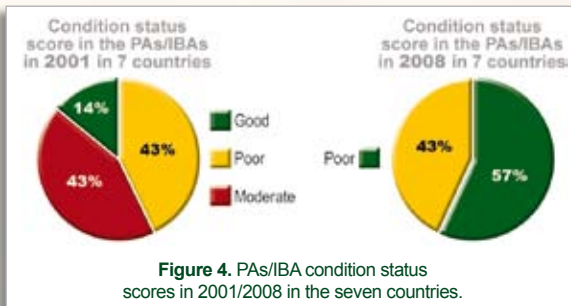


Figure 4. PAs/IBA condition status scores in 2001/2008 in the seven countries.

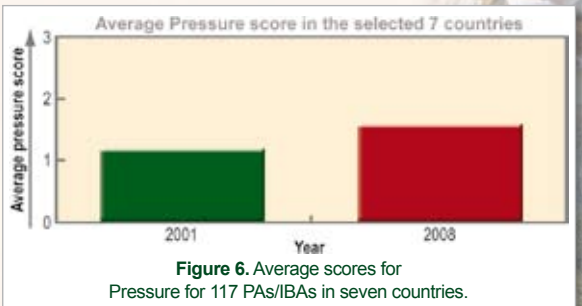


Figure 6. Average scores for Pressure for 117 PAs/IBAs in seven countries.

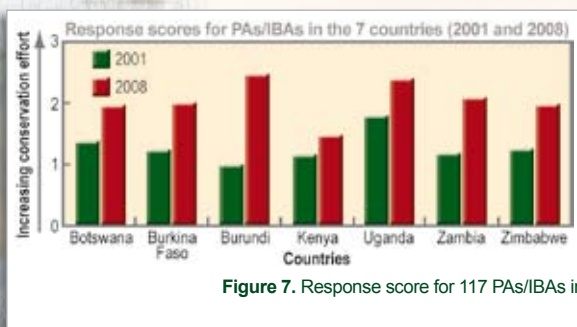


Figure 7. Response score for 117 PAs/IBAs in seven countries.

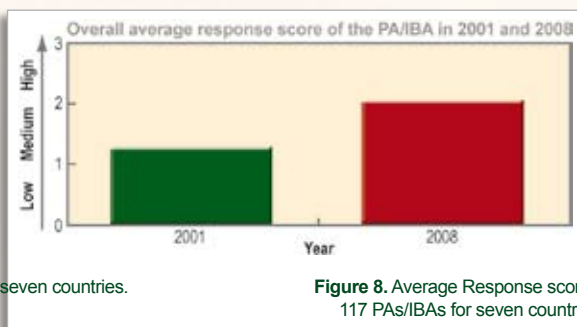


Figure 8. Average Response scores for 117 PAs/IBAs for seven countries

increased between 2001 and 2008.

Examples of sites which have shown much improvement are the Central Kalahari Game Reserve, the Okavango Delta and Mannyelanong in Botswana. This is attributed to the comprehensive and effective implementation of existing management plans

Figure 8 shows the average Response scores for the seven countries in 2001 and 2008. This illustrates that there has been an overall increase in the level of conservation actions across the 117 sites.

Within the scope of this project, a wide-ranging intervention measures are being undertaken through a

collaborative approach by the governments, NGOs and Site Support Groups, who acknowledge that the threats facing Protected Areas that are currently being monitored in Africa are on the increase and subsequently they are having a significant impact on biodiversity. Developing capacity, strengthening policy and advocacy, and NGO/Government Partnerships are some of the common interventions being employed in all seven countries. The project also acknowledges that there are other intervention measures being undertaken by various parties at national level as part of efforts to reduce biodiversity loss.



Illegal charcoal burning, one of the main threats to forest conservation in IBAs (@NatureKenya)

- In analyzing the status and trends, the countries in Africa will in future consider the various categories of PAs (National Parks, Forest Reserves, Game Reserves) as well habitat types (forests, wetlands, grasslands, transition ecosystems). These comparative analyses would help to clarify whether certain level of protection is better than the others or the condition of certain habitat types is better than other.
- Require a detailed analysis of the threats per site because impact on individual species and their habitats is real and therefore there is need for monitoring these impacts and provide alerts. Invasive alien species as a significant threat to Africa's biodiversity should also be considered.
- There is need to also determine trends at protected areas versus non-protected areas so that information generated could be useful for advocating designation of non-protected areas.
- Noting that abundant biodiversity exists outside Protected Areas, there is need to scale up monitoring of non – protected sites in Africa.



State – the condition of Chobe National Park – Botswana representing a mosaic habitat types (@Danae Stevens)

The IBA monitoring approach is a practical method which can be used by conservationists, local communities, government and non-governmental institutions and policy makers to guide practical management and conservation actions at IBAs. The system is sensitive enough to detect changes in site condition and is sufficiently simple to be implemented with limited training and resources and without sophisticated technology. The results provide useful information for managers of individual protected areas, management agencies responsible for suites of sites and the national government.

The IBA Monitoring Framework is a useful tool as it allows threats to be identified and their impacts assessed; priorities to be set; solutions to be developed and the success of conservation action to be assessed.

The integrity and sustainability of the Protected Area networks are dependent on knowing the status and trends of biodiversity at these sites and on instituting appropriate responses when and where required.

From the monitoring activities conducted in these countries it is evident that the pressures on biodiversity have been increasing, falling far short of the target to reduce biodiversity loss. It is imperative that legislation be enforced and alternative sources of livelihood be provided to ensure that threats such as over-exploitation are curbed.

While it has been shown that efforts to conserve biodiversity have increased in all countries efforts, a lot more still requires to be done. Only in Botswana is there an improvement in the condition of biodiversity within some of the PAs/ IBAs.



Monitoring and conservation of trigger species in IBAs – Uganda (@Herbert Byaruhanga)

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 Zambia	 Zimbabwe		