

Biodiversity survey in realistic forestry inventory in some African countries

Study Safeguards from Field Experiences NOW!

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International Requirement of National Forest Monitoring System

4/CP.15 Para1 (d) ii

Provide estimates that are **transparent, consistent, as far as possible accurate**, and that **reduce uncertainties**, taking into account national capabilities and capacities

1/CP.16 Para71 (c)

A **robust** and **transparent** national forest monitoring system for the monitoring and reporting of the activities...

12/CP.17 Annex (a) **Guidelines for submissions of information on reference levels**
Transparent, complete, consistent and **accurate** information, including methodological information, used at the time of construction of forest reference emission levels and/or forest reference levels



Aspect of Realistic design for NFMS

In terms of....

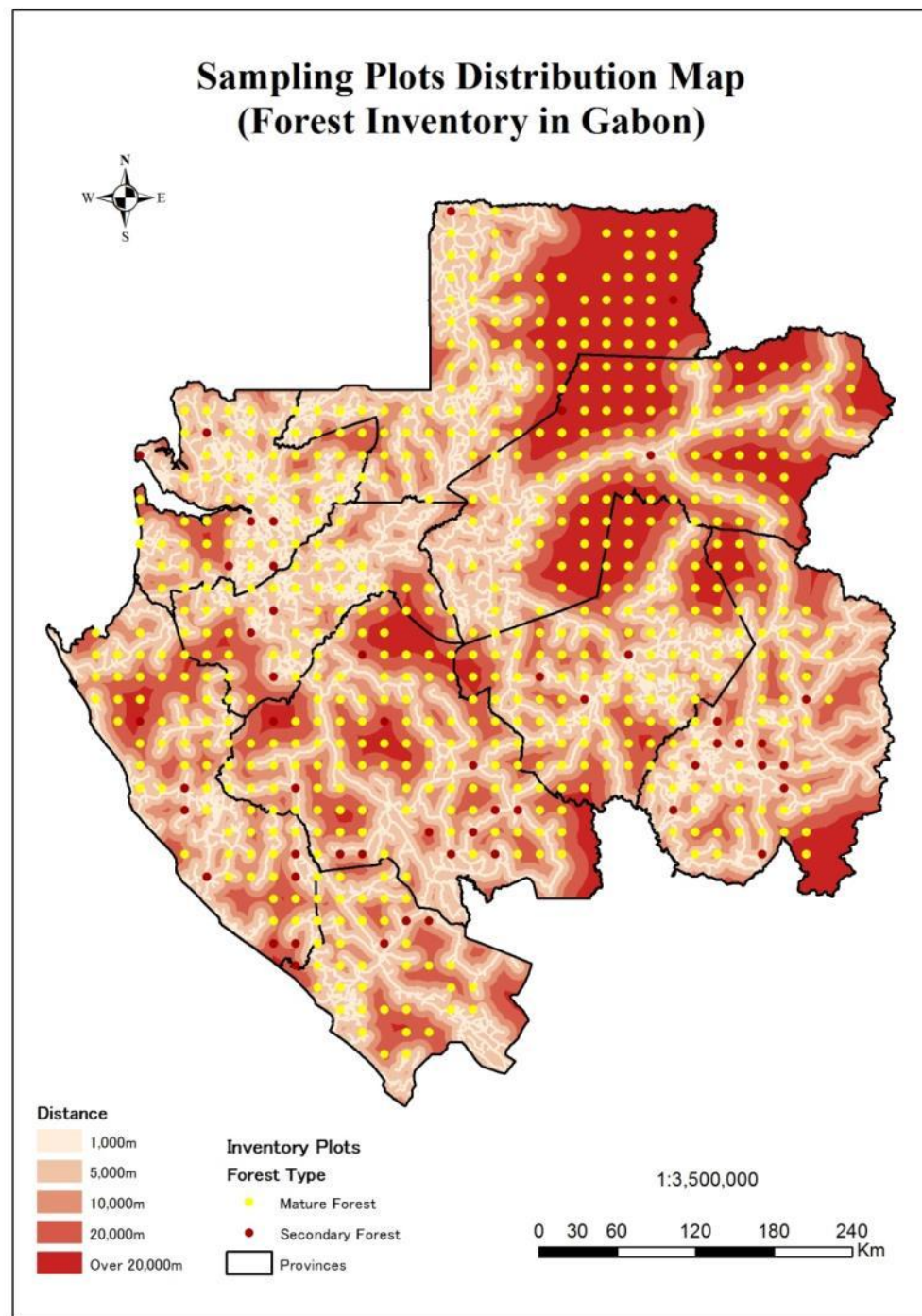
Finance	Vehicle, Motor Bike, Field measurement equipment, Satellite data, Software,
Current capacity and their development	Number of experts and skill level in current situation
Design of field inventory	Systematic sampling ↔ accessibility
Consideration of Bio-diversity	Scientific methodology ↔ field measurement skill
Monitoring subjects	Including degradation ↔ cost efficiency
Monitoring intervals	Biennial report ↔ data sources



Case study of Gabon - Challenges of access-

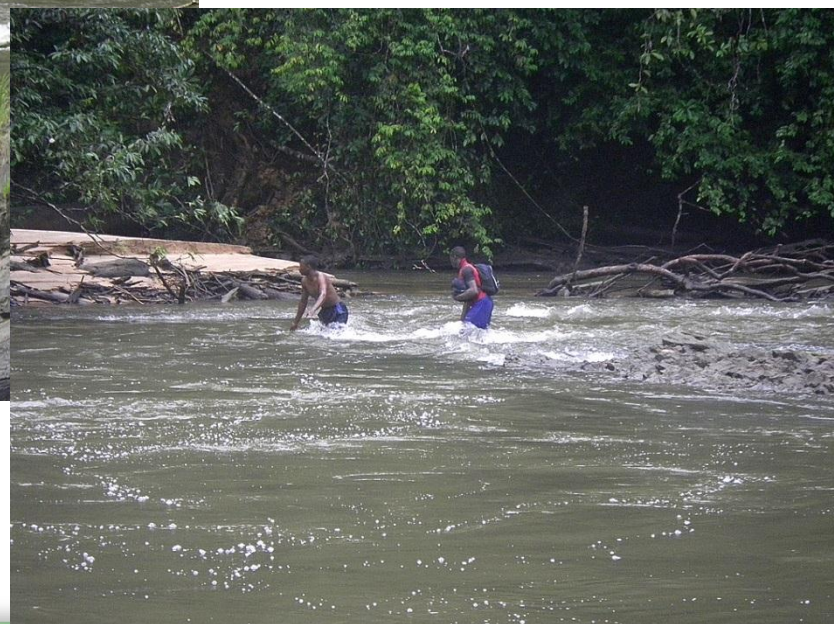
Distance	Number of Plot	Percentage
1 km	105	15%
5 km	235	34%
10 km	124	18%
20 km	132	19%
20 km ~	92	13%

Total 688 Plots





Case study of Gabon(2)





Case study of D.R.C –Challenges for biodiversity survey –

Skills of species identification on biodiversity survey required high expertise. Human resources of this field is quite limited and needs a lot of time to build capacity.

Therefore, cooperative work with local people and utilize their knowledge is one solution of realistic biodiversity survey.

Fauna habitat information survey with local people





Case study of D.R.C –Challenges for Biodiversity survey –

Fiche de terrain pour Enquete sur Faune

No.2

N°	Nom commun	Catégorie d'observation	Catégorie d'abondance	Forêt dense humide	Forêt dense sur sol hydromorphe ou forêt inondée	Forêt de montagne ou de transition	Forêt sèche claire et dense	Savane humide et arborée	Savane arborescente et herbueuse	Prairie aquatique et marécageuse	Zone à faible couvert végétal et sans couvert végétal	Agriculture, village	Eau	Autre
22	Tragelaphus streptoceros Grand koudou													
23	Oreotragus oreotragus Oréotrague													
24	Taurotragus oryx Elan du Cap													
25	Taurotragus derbianus Elan de Derby													
26	Hippotragus niger Antilope noire													
27	Kobus lechwe Cobe lechwe, Antilope lechwe, Antilope des marais													
28	Myosorex blarina													
34	Potamogeton velox													
35	Micropotamogeton iwenzoni													
36	Procliva capensis Dianai des roches													
37	Heteromyia chapini Parthéra leo Lion													
43	Acinonyx jubatus Guépard	B	3	✓	✓		✓							
44	Lycan pictus Lycan, Cynhyène, Chien de chasse	A	1					✓	✓					
45	Lutra maculicollis Loutre à cou tacheté													
46	Oribonictis piscivora Ochette aquatique													
47	Orycteropus afer Oryctérope								✓					
50	Manis gigantea Pangolin géant	A	1	✓					✓					
51	Claytonia de Grauer, fauq gabemouche de Grauer	A	1		✓					✓				
52	Bucconus abyssinicus Calao terrestre d'Abyssinie	B	3	✓	✓		✓							
53	Tringaceps (Aegypius) gonoceph Vautour à tige blanche, vautour huppé													

Interview sheets for local people about fauna habitat information



Case study of Botswana

–Importance for biodiversity survey –

In Botswana, national park and game reserve forest play a significant role in sight seeing resources. Therefore, surveying about fauna (especially, mammal species) are assigned high priority.

- ☑ Observation from vehicle
 - ☑ Introduce fix-point camera
- ⇒ **Measurement of species and population**

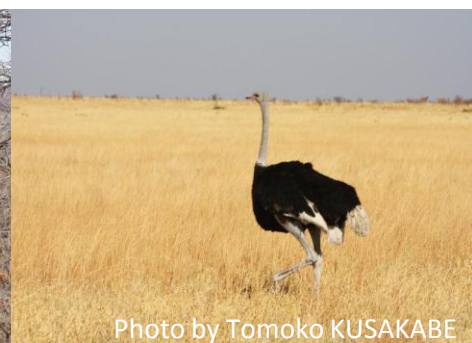
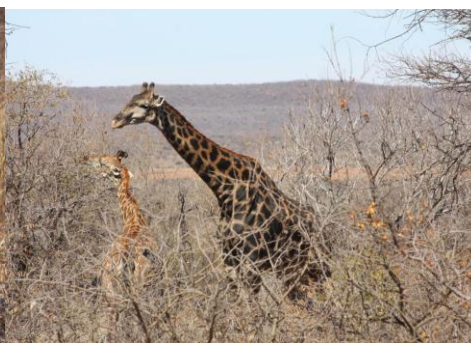
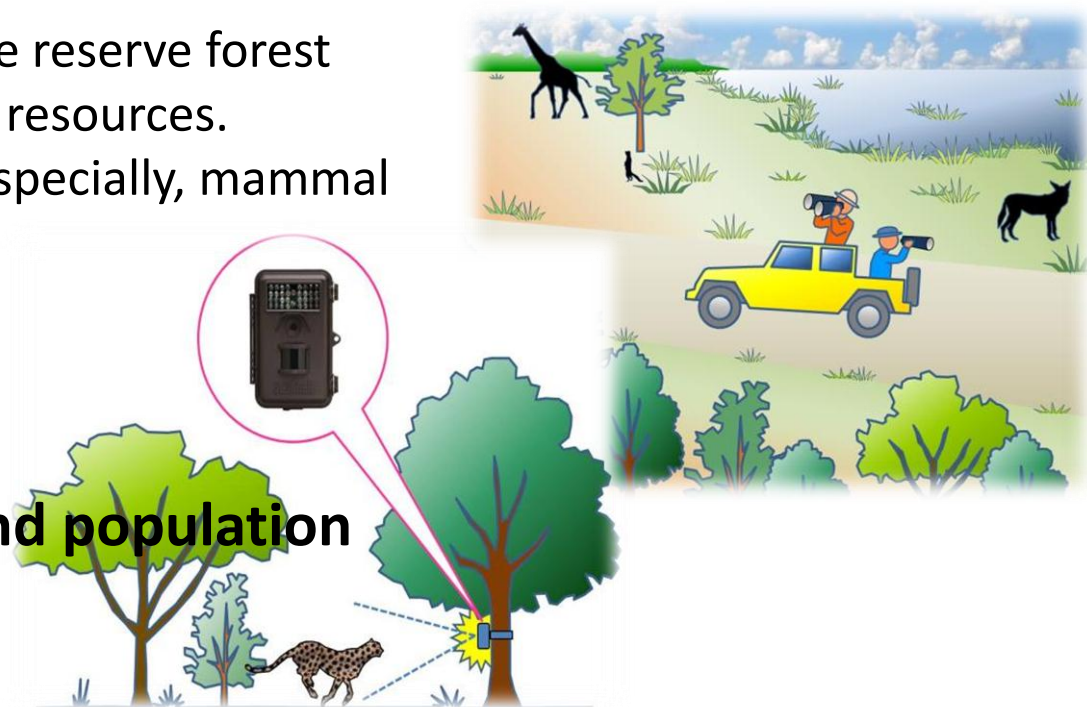


Photo by Tomoko KUSAKABE



Conclusion and proposed solution

- When full fill of UNF3C requirement and carrying out the design of NFMS, we can not reach full scale at a stroke.

Solution⇒Introducing stepwise approach

- Allows flexible system taking into account of national circumstances (such as finance, forest status, capability level)

Q! ⇒Reduction of emission measured by different methodology could treat as same credit ?

- Design of field-base forest inventory, systematic sampling is robust methodology but impossible to operate.

Solution⇒Introduce limitation of accessibility.

- Design of biodiversity survey, we have to follow scientific approach but carefully attention is needed to explorer human resource and their level.

Solution⇒Simplify of methodology and cooperative work with local communities.

