

INDIVIDUALIZATION OF COMMON WETLANDS IN UGANDA AND  
THE ROLE OF CHANGING ECONOMIC OPPORTUNITIES:  
A CASE STUDY OF IGOGERO WETLAND, IGANGA DISTRICT

BY

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## 1. INTRODUCTION

Issues of ownership and management of communally used natural resources are becoming a growing concern in East Africa. Many Countries are in the process of analyzing and formulating policies in regard to tenure and sustainable management of these common property resources. In the case of Uganda, a number of factors including social, economic and political ones, have greatly affected the existence and state of these resources in the recent past. Changes in these factors have often resulted in the emergence of different local tenure systems in different wetland areas in Uganda.

The multiplicity of tenure systems in Uganda are said to have led to increased confusion and insecurity (Marquardt, 1994). The extension of such ununiform tenure regimes in Natural resources inevitably put the sustainability of these resources at stake.

It was in light of this that the second Jinja workshop on Land Tenure in Uganda (1993) organized by the Land Access Project under the auspices of USAID/WORLD BANK and LTC/MISR recommended a research on the information gaps in the existing tenure rights and management structures controlling access to and use of the wetland communal resources in Uganda.

By independence (1962) wetlands covered almost 10% of the total area of Uganda. During the colonial period these wetlands like other natural resources were designated as reserves and placed

under the central government. However, much as the wetlands legally belonged to the central government, the traditional institutions at the time also had in place machinery to protect them.

With the political changes that followed, these traditional institutions lost control over these resources and the wetlands were placed directly under State control. The State however lacked the capacity to actively protect and manage these wetlands. The local people also lost that sense of attachment to their wetlands. It then became very difficult to understand the exact tenure and property arrangements operating where the wetlands still existed.

The newly enacted National Policy for the Conservation and Management of Wetland Resources provides for some legal framework over the issues of tenure management and local participation however, implementation of these policies is yet to take root.

This presentation is derived from one of the studies out of the Jinja recommendations. The major study was to identify common property wetland resources and analyze the existing patterns of access, control and management in these wetlands. Igogero wetland was selected as one of the study sites.

## 2. PURPOSE

Findings from the study indicate that there is a high degree of individualization in Igogero wetland. This paper therefore focuses on the major causes of this individualization at Igogero and outlines its impact and implications to the community and the wetlands.

Common property is one of the four property regimes - others being state, private and open access. It can also be referred to as corporate group property. Individualization is the conversion of this corporate group property to individual property in which a natural rather than a legal person is the owner (Bruce, 1993). This conversion can also occur with state property where state rules and governance institutions tend to collapse as has been the case in Uganda's wetlands in the recent past.

Several factors do influence this process. At Igogero it was found that the major influencing factor that led to the individualization of the wetland were the changes in the economic opportunities in the 1960's and 1970's.

This paper reviews the role played by these changes, the causes of the changes and the impact and implications of the resultant individualization on the community and the wetland.

### 3.0 METHODS

#### 3.1 Study Area and Study Design

This study was conducted on Igogero wetland. Igogero is a long stretch of permanent wetland in Iganga district, in eastern Uganda. It forms part of the network of the wetlands that drain through the districts of Iganga, Kamuli and Tororo into the Lake Kioga Basin. The original objective in selecting a study site was to locate an isolated wetland under one community, and base the study on that one. But it was not easy to locate one isolated wetland under one community. Most wetlands in Uganda are long stretches and, therefore are usually shared by more than one community.

The section of Igogero wetland studied is almost 3 km long and about 2 km wide shared by the villages (local Councils) of Butaba on one side and Nakawa on the other. This is at a location of 20 km east of Iganga town along the Iganga - Tororo/Busia highway.

#### 3.2 Methods of Data Collection

Data and Information were collected largely from the community of the two villages. First of all, a general PRA was conducted with the people. This was followed by focused interviews with selected groups in the local and administrative ranks

particularly involved in decision making and policy implementation.

A sample survey was subsequently carried out on 106 randomly selected household from the two villages to quantify the PRA data. Secondary information was also gathered.

#### 4. FINDINGS

##### 4.1 Characteristics of the Community

###### (a) Socio-economic facts and figures

Table I shows some characteristics of Igogero wetland community, which is within 5 km of the wetland. Seventy nine percent (79%) of the households are male-headed, while 21% are female-headed (Table 1 a). The population is rather young. Over two thirds (64%) of the household heads are the 20-49 age bracket. The biggest percentage (31%) is in their 20's, followed by the 30's (18%) and 40's (15%). There are a few people who are over 80 years (Table 1b).

Nearly three quarters (74%) of the household heads are married, while 20% have ever been married and subsequently either separated, divorced, or got widowed. Six percent (6%) of the household heads are single (Table 1c).

The average family size is large; the mean household size is 6.4 persons. Forty percent (40%) and 42% of the households have 1-4 people and 5-8 people respectively (Table 1d).

Literacy levels among household heads are low. More than a third of them (34%) have never been to school, while of those who have been to school, 80% never went beyond primary seven (Table 1e).

The size of land holding per household is small. More than half the households (54%) have up to 2 acres each. Exactly half the households have between 1 and 2 acres each (Table 1f).

(b) Sources of Livelihood

Table 2 shows that the main sources of livelihood in the community by the household heads are cultivation, trade/commerce, remittances from relatives and casual labour. Their frequency and order of importance declines in the same order.

Table 3 shows that the commonest crops grown are maize, sweet potatoes, cassava, paddy rice, millet, beans, soy beans, coffee and sorghum (Table 3). Of these, sweet potatoes, cassava and millet are grown mainly for subsistence, while paddy rice is grown for sale. Maize is grown as a major crop for both cash and subsistence.

(c) Food Self-Sufficiency

Table 5 shows that the community is not self sufficient in food production. Close to 90% of the households reported that at one time or other, they have to buy additional foodstuffs to supplement home production.

4.2 History relating to the wetland and the community

Settlement of the community in the two villages dates back to the 1920's according to PRA findings. These early settlers were allocated land by the local traditional chiefs of the area. Land was still free fertile and in plenty. The major ethnic group are the Basoga, the traditional tribe of the area. There are however other groups that migrated into the area. The survey results (Table 6) indicated that 74% of the respondents were natives born in the area, but 26% were immigrants either from within Busoga (79%) or outside Busoga (21%) of those interviewed. However, the sample survey shows that most immigration occurred between the 1950s - 1970's. The 1970's however had the highest rate of immigration (32%). The majority of the immigrants said they came in search of land for cultivation and settlement 46% and those who came for marriage reasons (43%).

The new settlers gained access to land either through purchase, hiring or borrowing from the early settlers. Earlier there was a tendency of settling people ("Foreigners") at the peripheries' of the wetland to use them as shields against dangers from the wetlands. The wetland was still free and respected as stateland providing some basic resources like water, fish, building materials, etc. to the community.

#### 4.3 Evolution of Economic Opportunities available to the Community

The area studied belonged to the cotton belt of the 1950 - 60's and cotton provided the main source of income to the community. However, PRA findings indicate that by the early 1970's the cooperative unions were no longer buying people's cotton. This led to the abandonment of the crop as a major cash crop.

The political and economic environment of the 1970's favoured and boosted the coffee trade through smuggling. Coffee replaced cotton as a major source of income. Towards the end of the 1970's smuggling was curbed. However, normal coffee trade was not profitable because of the low domestic prices. People had to look for an alternative.

As table 1f shows, the sizes of the land holdings were on average too small to afford commercial farming in addition to subsistence and residence. Population sizes had grown and land was becoming scarce. The land was also becoming less productive (Table, 7) mainly as a result of over use of the soil.

There was need to identify high value crops that could provide reasonable income out of small holdings. Maize production was already being reduced by the decreasing soil productivity and land size.

The community then recognized paddy rice cultivation as the only alternative. Earlier rice cultivation had been practiced at the periphery of the wetland for subsistence by the women. Government had by this time also opened a Rice Scheme in Kibimba wetland for paddy rice and the results were good. This had highlighted to the communities the potential of the wetland for economic production of paddy rice. And there was a ready rice market, at relatively good prices.

The pressure for an alternative economic opportunity and the demonstration from Kibimba Rice Scheme that the wetland could effectively provide that opportunity therefore led to changes in the traditional uses of the wetland. This in turn led to the emergence of specific local forms of land tenure in the wetland. The owners of the inheritable dryland bordering the wetland stretched their boundaries into the wetland where customary law now continues to apply. Boundaries were demarcated. This occurred in both villages which had their boundaries now stretching up to the stream flowing along the middle of the wetland. The wetland had now changed from the original "common property" regime to the individual property.

#### **4.4 Nature and Operation of Individualization at Igogero**

The new 'Owners' now claim full rights over these extensions into the wetland. The community members presently have access to the wetland for various uses. Of the 93% who said they use the wetland 85% were farmers actually owning land parcels in the

wetland (Table 8). This 85% however acquired ownership through different ways. Some hire the land 29%; inheritance 25%; those who said they actually purchased the wetland parcels were 21%; others were just given by the owners, 20%; whereas those who borrow were very few, only 7%.

The sizes of the parcels are small. Fifty nine percent (59%) of the 76 respondents who own wetland parcels in the survey said they own only one acre and below. In order to earn a substantial income one has to grow high value crops, and use all possible means to maintain productivity of the soil.

The wetland is now highly exposed to outsiders. In Table 9, 27% of those with land in the wetland said they are able to sell and/or transfer their wetland parcels to people outside their families. Of these 64% said they don't require anybody's approval to do the transaction. Of those who require approval to sell their parcels the majority, 88% must consult the families or the local councils (13%). This shows that there is still some recognition of the traditional customs in the area.

There is some high degree of restriction of access to or use of the wetland resources by those owning parcels in the wetland. Of those who own parcels, 68% said they have the ability to restrict access to their parcels and majority of them, 89% do not have to refer to anybody about this restriction (Table 9). Only 11% said they had to refer to either their families or elsewhere before they can deny anyone access. Thirty two percent (32%) of

the respondents said they did not have the ability to restrict access to their parcels. To a large extent, therefore, individuals have overall rights in this wetland. There are no more common regulations governing access to and use of resources. It also looks very clear that there are no state rules operating in the wetland any more.

Individual tenure rights seem to center mainly on land ownership and for cultivation. There is less emphasis on the other resources of non - or less economic value. Where these still exist they are open to all including outsiders.

#### 5. Impact and Implications of Individualization to the community and the wetland

Individualization does not affect only the community but also affects the resources.

- a) The community lost control and free access to their wetland. Those who did not have land bordering the wetland became the losers while the others became landlords.
- b) A mixture of property regimes ensued. While land ownership and use is individual property, the other resources where they still exist are under open access. It becomes impossible to implement common strategies for sustainable management over resources which are on ones individual property.

- c) Land tenure systems that were restricted to the upland now operate within the wetland and this means that the types of conflicts that occur on the upland are bound to occur also in the wetland. These conflicts include conflicts over boundaries within the wetland, expansion of individual holdings, and succession. These conflicts present specific legal problems which may demand clear definitions of land boundaries both in space and time.
- d) The women have been marginalised mainly to the non-economic or less economic resources from the wetland (Table 10). Women don't inherit land, so the few who can manage to obtain it are the elite and more privileged who can afford to buy.
- e) Other than collecting water for household use (Table 11), the community categorize rice growing as the most important use in Igogero wetland today. Being the major source of income, denying the people access in the name of protection would be denying them income. However this definitely leads to the degradation of the wetland resource.
- f) As more land is opened up to grow rice, most of the traditional resources from the wetland are decreasing both in availability and quantity (Table 12 & 13). The losers in this case are those without direct access to land in the wetland notably the women. It is clear their direct benefits from the wetland are decreasing.

- g) The commercialization of this individual property has greatly exposed the wetland to outside risks. The outsiders must maximize production out of their parcels irrespective of the effects to the wetland and the environment in order to recover their costs.
- h) The idea of maintaining productivity by both the locals and outsiders from the small plots may in the long run require application of fertilizers and chemicals. These can be disastrous to the wetland in the long run. Some of these chemicals are known to drain into the water where they affect both the micro and macro fauna (Kizito, 1989).
- i) Individualization has affected social structures in the community. Those who lack ownership of the wetland have to respect and keep warm relations with the landlords'.

## 7. CONCLUSION

The results clearly indicate that changes in the sources of incomes of the community was a big driving force in the individualization of the wetland at Igogero.

The increasing population makes the sizes of the dryland parcels in the area too small to sustain commercial cultivation. As a result the soils on the upland have been over used, leading to reduced land productivity. More avenues must be sought to

improve on the low education levels of the people and encourage off-farm income generating activities.

Intensive agriculture with scientific methods would be the best solution to this but the people lack the capacity to afford the inputs and extension services are still ineffective because of constraints like transport and poor remunerations of staff. People need to be advised and assisted on how best to utilize the existing upland available to produce enough for both subsistence and income.

Family planning could halt the population increases so that pressure on the land reduces but the traditional polygamous nature of the local people tends to ignore this aspect. The people need to be educated on the importance of family planning and the consequences of large families under their present land and economic problems.

Although the communities are still aware that the wetland belongs to the state, lack of an immediate alternative source of livelihood makes it impossible for them to pull out of the wetland. It is even worse for the individual owners who directly gain an income by hiring or selling the land. Those who have bought the wetland parcels would also see it as if they being robbed of their property.

Implementation of any forceful means to "deindividualize" the wetland by government, would put the local administrative

implementors in an unexplainable situation. Some of them are also beneficiaries in the wetland. Secondly, they are directly elected by the local populace, so this would put ones vote at stake.

On the other hand continuing with this type of arrangement in the wetland, its future and that of the environment in general are at stake. Eventually all will be reclaimed until there is no more wetland and the potential for rice cultivation will be lost. The community will be back to where they started.

The challenge now is to formulate policies and lay strategies that will enable the people to utilize the wetland in a sustainable way. Both the State and the local people need to participate in the management of these resources. The people need to be involved in making the decisions affecting their wetlands so that they regain that sense of collective responsibility. But to have all these effected there is need to address the alternative sources of income and to reverse the individualization process.

## REFERENCES

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Table 1: Igogero Community Household Characteristics

Variables	Number of households	Percentage of total households
a. Sex of household head (N = 104)	82	79
i) Males	22	21
ii) Females		
b. Age (yrs) of household head (N = 106)	-	-
i) Below 20	33	31
ii) 20 - 29	19	18
iii) 30 - 39	16	15
iv) 40 - 49	11	10
v) 50 - 59	16	15
vi) 60 - 69	8	8
vii) 70 - 79	3	3
viii) 80'		
c. Marital status of household head (N = 106)	6	6
i) Single	77	74
ii) Married	21	20
iii) Divorced/separated/widowed		
d. Household size (6.4)		
i) 1 - 4 people	42	40
ii) 5 - 8 people	44	42
iii) 9 - 12 people	14	13
iv) 13'	6	6
e. Level of schooling of household head	36	34
i) None	70	66
ii) Yes		
highest level	17	26
-P1-P3	38	54
-P4-P7	13	14
-Secondary	1	1
-Post secondary		
f. Size of upland holding in acres	8	4
i) Less than 1 acre	27	50
ii) 1 - 2 acres	25	24
iii) 3 - 4 acres	9	9
iv) 5 - 6 acres	3	3
v) 7 - 8 acres	5	5
vi) 9 - 10 acres	6	5
vii) more than 10 acres		

**Table 2: Igogero Community Sources of Income\***

Activity	Common source of income			Most important source of income		
	No.	%	Rank	No	%	Rank
1. Cultivation	100	94	1	86	82	1
2. Trade/commerce	28	23	2	8	8	2
3. Remittances	16	15	3	4	4	3
4. Casual labour	10	9	4	1	1	4

\* Other source of income include livestock, salary and hiring out land.

**Table 3: Commonest Crops Grown by Igogero Community\***

Crop	No. of farmers growing	Percentage
1. Maize	92	94
2. Sweet potatoes	82	84
3. Cassava	81	83
4. Rice	60	61
5. Millet	46	47
6. Beans	25	26
7. Soya	16	15
8. Coffee	13	12
9. Sorghum	11	11

Other crops included irish potatoes, yield peas and bananas

**Table 4: The two most Important Crops Grown by Igogero Community**

Use	Crop	No. of respondents	Percentage
a) Subsistence	1. maize	57	58
	2. sweet potatoes	59	58
	3. cassava	52	31
	4. millet	22	21
b) Sale	1. maize	59	67
	2. rice	66	84

**Table 5: Igogero Community Households which have to Buy Foodstuffs for Subsistence**

	No. of households	Percentage
a) Buying	91	87
b) Not buying	14	13

**Table 6: Origin of Current Igogero Community**

Variable	Number of households	Percentage
a) <u>Place of birth</u>		
i) Born within in village	78	74
ii) Born outside village	28	26
b. <u>Origin of immigrants</u>		
i) Within Busoga	26	79
ii) Outside Busoga	6	21
c. <u>Date of immigration N=28</u>		
i) 1930s	2	8
ii) 1940s	1	4
iii) 1950s	6	24
iv) 1960s	3	12
v) 1970s	8	32
vi) 1980s	2	8
vii) 1990s	3	12
d. <u>Reason for immigrating</u>		
i) Availability of land for cultivation/settlement	13	46
ii) Marriage	12	43

**Table 7: Changes and Perceived Reasons for Changes in Land Productivity in Igogero community**

Variable	No of households reporting	Percentage of households
a. <u>Changes in productivity</u>		
i) Increased productivity	3	3
ii) Decreased productivity	89	97
b. <u>Reasons for decline of productivity</u>		
i) Soil exhaustion	73	79
ii) Changed rain pattern	5	5
iii) Pests/diseases	6	7

Table 8: Ownership and use of Wetland by Igogero Community

Variables	No. of households	Percentage of households
a. <u>Using wetland (N=105)</u>		
i) Yes	98	93
ii) No	7	7
b. <u>Owning wetland parcel (N=98)</u>		
i) Yes farmers owning	83	85
ii) Size of wetland parcel (N=76)		
i) 1 acre and below	45	59
ii) Above 1 - 2	20	26
iii) Above 2 - 3	6	8
iv) 5'	5	7
3. <u>Method of acquiring wetland parcel (N=77)</u>		
i) Hiring	22	29
ii) Inheritance	19	25
iii) Purchase	16	21
iv) Just given	15	20
v) Borrowing	5	7

**Table 9: Perceived Control and Exclusion Rights over Wetland by Wetland Land Owners in Igogero Community**

(1)

Variable	No. of households	Percentage of households
a. Permanent transfer of parcel outside family (N=83)		
i) Ability to sell/transfer		
- able	22	27
- not able	61	73
ii) Approval to sell or transfer (N=22)		
- required	8	36
- not required	14	64
iii) Approving authority to sell or transfer (N=8)		
- family or relatives	7	88
- local council/ govt.	1	13

b. Restriction of access or use of wetland parcel		
i) Ability to restrict access/use (N=82)		
- able	56	68
- not able	26	32
ii) Approval to restrict access/use (N=56)		
- required	6	11
- not required	50	89
iii) Approving authority (N=6)		
- family/relatives/clan	5	
- Other	1	

Table 10: Categorization of Igogero Community Users of the Wetland Resources by Gender in Household\*

Wetland Resource Use	Gender Type Using	Number of Households	Percentage of Household
a) Rice growing (N=76)	Male	38	50
	Female	7	9
	Both	31	41
b) Building materials (N=3)	Male	29	34
	Female	1	3
	Both	1	3
c) <u>Water</u> i) Household water (N=79)	Male	3	4
	Female	60	76
	Both	16	20
ii) Water for livestock (N=32)	Male	18	56
	Female	4	13
	Both	10	31
iii) Water for brick making (N=15)	Male	13	87
	Female	-	-
	Both	2	13
d) Fishing (N=30)	Male	28	93
	Female	-	-
	Both	2	7
e) Grazing (N=29)	Male	22	76
	Female	1	3
	Both	6	21
f) Medicinal herbs (N=27)	Male	3	11
	Female	11	41
	Both	13	48
g) Fuel wood* (N=66)	Male	5	8
	Female	52	79
	Both	9	14
h) Crafts* (N=43)	Male	9	21
	Female	27	63
	Both	7	16

More used by females - Household water, medicinal herbs, fuel wood, crafts.

**Table 11 Most Important Wetland Resource Use by Igogero Community Households**

WETLAND RESOURCE	NUMBER OF HHS NAMING IT MOST IMPORTANT	PERCENTAGE OF HHS
1. Household water	43	46
2. Rice growing	40	43
3. Grazing	5	5

**Table 12 Igogero Community Perception of Past Trends in Availability of Wetland Resources**

WETLAND RESOURCE	PERCEIVED TREND	NUMBER OF HHS PERCEIVING TRENDS	PERCENTAGE OF HHS PERCEIVING TREND
1. Papyrus (N=92)	Increased	27	29
	Decreased	55	60
	No change	7	8
2. Medicinal plants (N=81)	Increased	12	15
	Decreased	26	32
	No change	19	24
3. Pasture (N=93)	Increased	26	28
	Decreased	34	37
	No Change	19	20
4. Hunting (N=79)	Increased	13	17
	Decreased	36	46
	No change	2	3

Table 13. Igogero Community's perception of current levels of Availability of Wetland Resources

WETLAND RESOURCE	PERCEIVED AVAILABILITY	NUMBER OF HHs PERCEIVING TREND	PERCENTAGE OF HHs PERCEIVING TREND
1. Papyrus (N=95)	Abundant Scarce Very scarce	14 68 11	15 72 12
2. Sedges (N=74)	Abundant Scarce	32 40	43 54
3. Medicinal plants (N=72)	Abundant Scarce	16 33	22 46
4. Firewood (N=88)	Abundant Scarce	18 68	21 77
5. Pasture (N=89)	Abundant Scarce	34 49	42 55
6. Fish (N=87)	Abundant Scarce	37 46	43 53