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SPACE CONTROL AND NATURAL RESOURCES MANAGEMENT IN RURAL AREAS (south-west OF MADAGASCAR)

The south-west rural area of Malagasy was confronted in the twenty last years with the opening of the external markets, the amplification of the migration and the agrarian densification. The competition between activities in contracted and fragile spaces led lineage groups to retire with themselves, to fix the access to spaces and the use of the natural resources.

In a context of exacerbation of land conflicts which reveals the weakness of the social regulation, the essential question is the integration of the migrant communities in the local institutions and their participation in the management of the natural environment.

The environmental control promoted by the malagasy authorities with the support of the donors is implicitly based on the concepts of gouvernance and patrimoniality. Accordingly the coordination of the actors and the institutional negotiation governing the allowance and the allocation of natural resources suppose conditions of transparency and legitimacy and the taking into account the dependence between man and nature and the social dynamics at the local level.

Key words: rurality, migration, gouvernance, natural resource, patrimony, appropriation, land control, use, local management, values.

Subject area: Environment Politics and Law

Vis-a-vis with the exacerbation of the stakes with which are confronted the malagasy rural societies whose ways of life are still very largely dependent on the natural environment, this research^[1] propose to evaluate, to compare and to justify the modes of use of the environment and the resources according to ecological, economic and social criteria accepted by the community and the local societies concerned.

The institutional approach is based initially on an analysis of the relation of man to the environment in terms of mode of appropriation. It takes into account organisation, coordination and control of the rural actors in the management of their environment and their life framework. The interactions between man (actor) and nature (resource, space, rural environment) are considered on three levels, partially encased, according to concepts which qualify a relation (actor-actor and actor-nature), categories of actor and a specific share of the natural environment:

- the allowance as attribution to an actor of a limited and contingent right on an element of the natural environment;
- the assignment as choice of use of the object concerned with the allowance and resulting from an arbitration between alternatives;
- the use or process of evolution in which is committed the natural object, partially controlled by

man; the user manages the object become «factor of use» in accordance with the retained project of assignment.

The approach also rests on the concept of natural resource not only as natural asset within the productive system, usually meant in Economy of Resources, but as element of natural environment, object of a human perception «invested» by physical activity, integrated in the system of representation [T. Ingold, 1992]. «Revêtue par l'homme d'une fonction d'usage et de non-usage», the resource is object of different assignments («multiple-use»: pastoral, agricultural, ...), is exposed to the ecological disturbances, is element of the farming system (for example the water, the grass and the salted mineral as components of the pastoral system), fits finally in a socially built space and the ways of life of the populations.

The «multiple-resource space» [O. Barrière, 1995], receptacle of functions of composite uses, potential and real uses, simultaneous or successive uses, is placed then in the centre of the concerns and the stakes of the individuals and the communities.

This optics integrates institutional dynamics in progress in Madagascar, concretized in particular with the recent 95/025 outline-law instituting the Gestion Locale Sécurisée (GELOSE as Protected Local Management), which gives to the voluntary rural communities within a contractual framework a responsibility and a more significant autonomy in management of the territorial resources.

Located at less than 70 km at the east of Tuléar, the zone of investigation corresponds to the southern part of the plateau of Vineta (forest of Belomotra) and overlays in south and east the territories of the alluvial valleys of Onilahy and Sakondry. This area is an outlet to the expansion and the conquest of the tanosy and mahafaly migrant populations coming from est and south territories threatened in their agricultural potentialities by the recurring ecological upheavals and where the rangelands became far too exiguous. The area is also a place of confrontations between rural populations about the control the environment and the access to the natural resources. After a quick reminder of the dynamics of conquest and agricultural colonisation, we will approach successively the modes of appropriation and territorial control and the institutional forms of coordination and responsibility.

1. Spaces and settlement

Put aside exceptional ecological events, dryness, invasion of locusts, and the periods of socio-political disturbances^[2] which could encourage the populations with the exodus and to seek the security, similarities and constants are to be found in the migratory motivations and the modes of fixing of the housing in the zones of old settlement as well as in the two alluvial valleys and the plateau.

1.1 Privileged occupation of the valleys

The significant anthropisation of the banks of the valley of the river Onilahy is due to successive arrivals of migrants, masikoro (of the area of Mahabo), tagnalana (families coming from the littoral), and mahafaly (from the southern plateau). Rice-plantations and parcels of tubers were first made up on the alluvial and marshy soils of the meanders and the easily flooded dead arms, and big townships were established on this side pad of bank, being accompanied almost always by the constitution of parks of useful trees (tamarins, mango trees, goyaviers etc). From the Thirties, whereas the majority of rice suitable soils were already exploited, fields of dry cultures (corn, manioc, marrow...) were opened on the highest soils of the river, many pieces but of reduced size in consideration of the bank narrowness strongly

boxed between the northern and southern steep sides of the calcareous plateau.

The human settlement on the river was mainly directed by food needs, also for populations of pastors like Mahafaly in search of «wet» soils (insinuation of stronger rainfall) and which left their animals at home. Only indeed low-size herds easier to keep could be satisfied with the grazing areas of the valley on the hillside surrounding foresters, on the already harvested parts in against-low, or on land of natural aquatic vegetation.

Before returning there further, let us announce that the growing population density and the edaphic upheavals (frequent risings of the river forsaking or occupying again certain meanders, carting significant sandy alluvia on its course) largely devaluated the agrarian potential of the low valley in the west of Tongobory, causing the search of forest cleared patches on the hillsides and the northern plateau when at the beginning of the Seventies the requirements in commercial and food cultures increased.

In the valley of Sakondry river, the heterogeneity and diversity of the physical environment, the chaotic foothills around Vatolatsaka, the presence of the principal affluent of Onilahy, probably played a role in scattering the habitat and reducing the size of the hamlets, opposing the form of the settlement of this «dry» valley (flows only during the rain season) to that of the river.

Groups of tanosy population of the south-east gradually occupied the various ecological facets of the natural environment by setting first rain food crops requiring not to much work (corn and manioc) on the argilo-muddy hillsides, rice-growing on the easily flooded soils and the zones of gallery-forest and savanna assigned to the cattle. The animal farming accompanying the migration experienced a spectacular development here putting in seasonal complementarity the rich and diversified rangelands in hollows, the water points in dry season, the salted cure, and the grazing areas of the plateau.

With the agricultural extension and the importance of the parcels of manioc, a practice of semi transhumance towards the west of the plateau appeared at the beginning of the Fifties, in particular to move away the animals during the period of culture. The grazinglands distant of more than one day walk of the village become accessible in rain season if the security of the men and the cattle can be assured and if a territorial control is organised at the collective scale of the lineage group. In front of the agricultural and pastoral increasing saturation of the territory of the valley and the pejoration of the soils (erosion, stranding, floods), the men then went up to the close plateau, according to the cattle search of new pastures towards the west.

1.2 Migratory extension on the plateau

The landscapes of the plateau of Belomotra with in centre a savanna raised on russet-red soils enamelled of temporary ponds and in periphery a dry caducifoliée forest on limestones outcrops [Solomon J.N., 1978] were regarded a long time as seasonal grazing spaces for the cattle. In fact the habitat is precarious there with small dispersed hamlets partially deserted during the dry season after harvests.

The greatest centres and north-eastern part of the plateau initially fell into the tanosy bosom of the permanent villages from Sakondry when, in the Thirties, their herds started to carry out incursions there, protected from the aggressions and theft by armed herds men. Some large shaded temporary ponds in the centre of savannas facilitated the installation of a seasonal transhumance with the construction of parks with cattle, the establishment of settlements and the first food crops.

The tagnalana and mahafaly incursions on the west and the north-west forest part of the plateau at the beginning of the Fifties express the commercial pressure of needs in energy and materials of the agglomeration of Tuléar (shipbuilding, building, infrastructures) but concern at the beginning only opportunist individuals installed without the authorisation of the natives. The profit expectation on the timber cutting down encourage the operators to make come their friends and by effect of drive cause, with food seedings in the forest clearings, the progressive disparition of the forest.

At the beginning of the Seventies, with the national political crisis and the famine in the campaigns, the agricultural migrations of the peripheral populations (Onilahy, Sakondry, Taheza) in evil of food resources become extensive, consolidated at the following decade by the «boom» in the demand for corn.

Whereas Tanosy were satisfied with the rangelands (in theory prohibited of cultivation) and of increasingly many fields in savanna after the overflows of Sakondry^[3], Mahafaly, Tandroy and Tagnalana make profitable situations of permissive access to land to obtain concessions of use in forest, to clear and set up food and commercial crops. The fast conversion of the forest rent into manioc and corn provides sufficient accumulation for the migrant to come back to the country in selling land, pleading of a fatidra^[4] relationship with the natives to transmit the right of culture to new migrants, and thus of following like the example of the allowances conceded to Mahafaly of Ejeda by a tompon-tany bara of Mamelatsy on the south-eastern part of the plateau.

With the attenuation of the tanosy lineage land control on the savanna rangelands, the agrarian conquest initiated with transhumance starting from the villages of Sakondry was exceeded in less than fifty years by the external migratory pressure. The almost complete man making of the forest and savanna spaces lead to the inversion of the initial, pastoral assignments versus agricultural, for the essential profit of the immigrants. A strong proportion of Mahafaly of Onilahy river, touched by the destruction of their paddy-field areas, have now permanent fields in savanna and on old cleared patches.

With through the agricultural and pastoral requirements of the natives and the migrants in this south area of Madagascar two finalities arise. That of the short term, the food requirement of self-sufficiency, rests on a sufficiently perennial access to arable land. That of the longest term, the social reproduction, requires an essential individual and collective accumulation (saving in cattle) to assume the social obligations of its lineage group, in particular at the time of the funeral for which one is responsible. It supposes also availabilities in vast and diversified rangelands. The current occupation of the plateau and its fringes by the various ethnic groups then raises the essential question of the land constraints and of the sat of rights.

2. Appropriation and land control of the territories

The importance of the agrarian colonisation of the plateau of Belomotra show that traditional control by the tompon-tany groups of the allowances and the land access, although precise and constraining for the new ones come, was quickly overflowed by migratory dynamics and particularistic strategies. In this respect the external environment, particularly administrative and socio-political, seems to be at the same time factor and instrument, impossible to circumvent and ambivalent, of the play of the actors.

2.1 Original modes of allowance

The initial appropriation^[5] of a territory by a community allows an assignment to such or such type of use according to the local ecological characteristics and the social and economic needs for the group: crops, collection of vegetable or mineral material, ceremonial place, water point, rangeland, etc. Attaching a framework to the human activities, it will make it possible to constitute a commons reserved for the magic, social and religious worships; it will also be used as reference to the individual allowances and to the rules related with the use and the transmission of the land rights.

In the alluvial valley of Onilahy, the individual allowance relates primarily to the best soils of baiboho, and the distribution, visible with the splitting up of cultivated area, is carried out between families of the same generation than the first occupying lineage group. Only the prolonged disaffection of the land, by extinction of a lineage branch or by final migration, could theoretically allow an individual new allocation within the lineage group. With the increase in the land pressure on a finished territory, the allocated families then will want to practise continuous cultivation to avoid giving a handle to the requests of land which call upon the longo relationship, or will prefer to anticipate by granting loans of parcels to knowledge or close parents.

On the forest slopes intended for hunting, gathering and collective rangelands, the individual allowance of the land is not foreseen and the later cleared patches of this «common» space, badly delimited, often cause conflicts between close villages.

The particular statute of the calcareous plateau express the power relationship dominating in this area at the beginning of the century which rested on fear and respect of tanosy lineage group of royal origin by the other ethnic groups as bara, masikoro and mahafaly. Complementary to the grazing lands in the interfluves of Sakondry river, its pastoral assignment rested on the exclusiveness and on common undivided access rule to the rangelands of the plateau and the places of salt cure of Sakondry.

How foreign groups could have been established in this environment relatively well controlled, where the land control was based on a principle of lineage and ethnic exclusiveness? The access paths to the land disposal which take multiple institutional forms rest on the formalisation of an inter individual social relation or a specific relation between foreign lineage groups [E. Fauroux and J.A. Rakotosalama, 1993] in which the tompon-tany, mediator between the forces of Surnature and the newcomers, play an essential role.

These institutional forms allow the conclusion of a restricted allowance, being able to be cancelled since the initial conditions of its granting are no more filled (rupture of agreement, conflict, death, departure in migration) and the degree of land security thus obtained is never quite high. The example of the precarious living conditions among mahafaly migrants dwelling on the plateau since 1988, in fatidra relationship with the bara tompon-tany Mahaleotse, shows that the agreement can also be an instrument of economic dependence, here with deducting a royalty on the production of corn.

This type of allowance forced by an institutional agreement is generally matched with precautions and guarantees. The applicant for a cultivable land will have in particular to obtain the confidence of the one having initial right and to show that its intentions are clear and coherent as for the destination of the required parcell. The conditionality is thus double,

prescribing a use in conformity with the actual collective assignment of the parcel (a field in a zone of cultivation), and prohibiting any form of new allocation to others being able to call into question the lineage allowance itself: concession, free transfer, setting in pledge, sale, etc.

In the territories of old occupation and high density population, the alluvial soils of the low zones, of greater economic and symbolic value, were from time immemorial the privileged target of the appropriation although they are currently in bad condition or even in waste land. On two banks of Onilahy river, the endness of the rice suitable land contributed definitively to freeze the allowances for the benefit of native lineage groups. The foreigners cannot generally claim to obtain something else than one simple seasonal right of culture in exchange of a counterpart on harvest (contracts of rice share-cropping granted by the bara and mahafaly tompon-tany at Mahaleotse), and sometimes still under constraint to ensure the maintenance of an infrastructure of irrigation when it exists.

A land control parapet is thus explicitly posed against the foreign migrant who must request a formal approval as for the use of the parcel and which will only be able to obtain a piece of the domain already distributed between the tompon-tany families. This system of allowance which rests on recognised and individualised institutions supposes that the protagonists know each other and meet regularly. In spite of this mode of apparently rigorous control, the control of a lineage land ownership resists with difficulty to the migratory pressure, weakened by the groups and the dominant persons who exploit the strength relationship and develop particularistic strategies.

2.2. Migrations, land strategies and clientelism

With the growing density of the territories and the exacerbation of the competitive relations for the control and the use of the resources, numbers practices and collective behaviours seem to be strategies of prevention or conservation by those having right threatened by outside.

Some people generally take by anticipation ways of land extension when it is still possible, by extension of the cleared patches on the plateau. Others like Mahafaly of Kavola, one of the oldest villages of the valley, grant since the beginning of this century temporary rights to the immigrants on vacant offset parcels of baiboho difficult to supervise. Magico-religious pressures can also be used to preserve a lineage supremacy^[6] on land, others still will try to impose on the immigrants lately installed specific rules of good agro-pastoral^[7] control.

But in a context of disagreement or internal conflict in a lineage community, the rules of land allowance become fragile, control and the endogenous regulation are ignored or diverted. A weakness appeared with the practices of substitution and secondary allocation between migrants, opening the gate to individualistic behaviours.

The agreement concluded for example in forest belt of the plateau between some mahafaly migrant lineage groups and the tanosy natives, based on a fraternal treaty of fatidra alliance, have in the facts enlarged the land access and the exploitation to the later migrants claiming same lineage group membership, progressively with their arrival. The common territory recognised to the lineage group not being the subject of distribution between the families, it gradually resulted a series of informal allowances in cascade which in turn played like migratory call upsetting the demographic relations. A number of mahafaly and tagnalana pioneers are thus received since about fifteen years without institutional validation, under the cover of a strictly personal relation with the native residents.

The examples of individualistic practices^[8] are numerous, rejected by the inhabitants, often founded on clientelist networks, which mainly circumvent the constraints of community allowance and guarantee, for those which form part of these networks, a certain freedom of access to the resources.

2.3. Land legitimation and search for external supports

Several types of collective initiatives were born since the beginning of the Seventies to try to limit the effects of the massive occupation of the plateau by the migrants and to thwart the practices of «rider-only». Proceeding from a need for legitimacy, recognition of the local authority and endogenous right, wanting to formalise the allowance between co-users of the same agricultural and pastoral zones, these initiatives call upon the external arbitration, at the very least the intervention of the authorities and the local counsellors as shown by the two following examples.

A «collective agreement» of distribution of spaces of the plateau in the west of Sakondry river concluded in July 1985 between four fokontany was legalised in the same time by the administrative authority of this period, the president of the firaisana and the popular adviser of the commune. This space was formerly a tanosy pastoral «common», a preserved territory for the seasonal lineage toets-aombe but, under cover of fictitious relationship, a not very scrupulous notable granted land to foreigners to open cotton parcels without the agreement of the fokonolona. With the aim of avoiding the interferences of land management and to reabsorb the crisis opened between tanosy lineage groups, mainly of tesaka and tesirania clan, a territorial delimitation was made between the existing fokontany, delegating this time the capacity of assignment of each one to the only corresponding portion of territory.

An indirect legitimation by a legal representative of authority or a recognised influential third person playing the role of mediator can also intervene when a conflict has little chance to be solved directly between the parts. In Anjankiriky for example existed in the middle of the Sixties a pact of mutual assistance sealed by filongoa between Mahafaly and Tanosy. With the amplification of the mahafaly migrations was posed the problem of an illicit cultivation of the rangelands and that of the land legitimacy of two tanosy lineage fractions of Fenoanivo asserting the opportuneness of the clientelism and the agricultural development. The question finally went up on the canton level and could not conclude itself differently than by the personal intervention of the president of the firaisana from Andranovory ruling on the field of respective legitimacy of the parts.

2.4 Land stakes and forest regulation

Often evoked in a very ambivalent way by the rural actors, the lawful and repressive action of the forest administration in the province of Tuléar concerns, through the control of the national forest, the use of the forest as cultivable soil and as vegetable resources for the timber and woodfire. It is the delivery of the licences for cultivation which will hold our attention here.

When the biodiversity and the ecological potential of Madagascar became in the Seventies the stake of the environmental policy, that contributed to relegate (in the texts if not in the facts) the early licence of cleared patch on behalf of a simple licence of «nettoyage et mise à feu» for food or industrial crops in secondarised forest, so in particular to limit the obvious progression of the agricultural occupation in forest areas and the strong densification of the

rural environment.

The impact of the individual licences granted in the villages is however not negligible on a local scale (more than 150 deliveries per annum in the cantonnement of Betioky-south in the posterior phase to Independence) and often involved landed property conflict claims at the point to cause an official statement.

With the Second Republic collective licences appear, concerning then a community of villages or a whole of hamlets, giving authorisation of setting in cultivation a forest block of only one holding. Beyond some opportunist individual behaviours, strategies of group appear then. Some seek to extend a saturated agricultural land limited by the surrounding forest, others turn to have secured already started cleared patches, others still seek to preserve a property threatened by incursions on the circumference of the village territory or to guard against possible going beyond rights.

With this collective licence in which the administration recognises one responsible interlocutor, the responsibility and the delegation of power inevitably set problem for the village community (the signatory can also be tempted to use the licence for its own use), and also for the later distribution of the allowances between having rights. Thus in the south of the plateau in Anzado the individual surface obtained on a collective licence of cleared patch granted in 1974 (approximately an average of 5 ha per family) seems to exceed the standard set here at 2 ha and cases of higher individual allowances attest evident relations of allegiance or clientelism.

The delivery of the licence of cleared patch which often fails to recognise local custodian laws is also subjected to the opportunist play of the actors, those which claim to be licensed representatives of the community, those which have their entrée to the local bureaucratic mysteries, and those which profit from a strong position in the social and political local hierarchy. It is possible to deceive the forest agent in making knowingly establish a licence for lands concerned with another district; in this example (the village of Fagnato) these areas in addition form part of the village territory and are not included in a zone of family exclusiveness.

A collective authorisation can also raise problems of good relation between close villages. Multiple incidents occurred between the farmers of the villages of Fagnato and Kavola, recipients in 1997 of a collective licence of 100 ha on the northern forest hillside, so much so that the administration had to cancel the licence a few months later. In this only zone where the agricultural expansion is still possible, the first corn cultivations rose the conflict.

It is finally necessary to evoke the interference of the administrative authorisations for the exercise of particular activities encroaching on the general use of the resources of a given village territory, like currently that of the charcoal working. The licence of wood cut granted to coal men confers a quasi absolute right on the resource since it refers neither to a concrete space of taking of, neither to a particular forest species, nor to a specified volume of rough or hand-made product. Nothing guarantees that the exploitation will not trespass on village territory, in these parts of the public property where are traditionally exerted the usufruct and collective use rights. The holder of the licence, free to contact the customary allocatee people, can choose to be granted with particular favours, to ignore prohibitions of passage or cut of which he could be informed, or to pretend to be unaware of them.

3. Modes of coordination and collective responsibility

The GELOSE procedure which institutionalise the resource management in some pilot zones

is too recent to be already operational^[9]. It is in fact on the scale of the residential lineage group, the village and the territorial social organisation that are currently exerted the environmental responsibilities, those of the resource assignment and allowance by the way of authority or institutional rules.

The fokontany, organ of representation and execution chosen by the fokonolona, is impossible to circumvent as the «official» local level of communication with outside, but it is also necessary to take into account the place and the role of institutions more deeply inserted in the rural society like the kabary, public meetings for consultation and decision and, in a more abstract manner, the inter individual and small groups exchanges, preparing decisions to be taken.

The ways of individual assistance and participation in the assemblies correspond little to the «democratic» western type rules and the lineage place of the individual can be prevalent there, just like its religious function, its economic weight, or the consideration of a network of dependent^[10]. In addition methods of negotiation and decision-making in village quarters follow thereby a slow and complex process of activation of social relations which concerns, in addition to specific collective institutions, a multiplicity of people with varied competences and capacities, socially interdependent but often implied in considerations of economic interest or personal strategies. The seniority and the ethnic origin can then make obstacle with a direct participation in the decision or even with a representation within the village. It is the case of the migrant and foreign groups still badly integrated even if they profit from temporary rights through rules of substitution or adoption (systems of relationship like ziva, fatidra, etc).

Attesting various steps of history lived between men and with the nature, omnipresent institutional rules formalise the intra-lineage relations and the relationship between the communities. As common engagement on principles and standards of behaviour making it possible to share an environment and its resources, these various institutions (convention, agreement, approval etc of different type and importance according to their object, space scale and social extent) bring significant lightings on the levels of authority and responsibility and on the «target» population potentially concerned by the decision-making. Variously recognised by the interlocutors, these institutions are however always the object of a minimum formalism, a written document or an oral oath devoting the engagement of the parties, attesting legitimacy of the contract and allowing its divulgation.

There are first the vakin-mitovy, conventions which engage the collective participation of all the members of the community. It may support monetary or work loads, exceptional costs (payment of a penalty or a fine whose community is indebted), or incurring expenditure. A dina fokonolona will be established between the resident lineage groups, to organise the perception of the receipts (type and amount of individual or family contributions, fines, carriage taxes) and the various contributions in work.

Titike collective agreements can be concluded between close ethnic groups sharing resources and a commun activity space. It is the case of a pact of reciprocity concluded in the Sixties between the bara tompon-tany of Mahaleotse and mahafaly migrants of the plateau. Based at the beginning on an old alliance of filongoa type, this agreement concern, on the basis of space segmentation and authorisation of cultivation for the migrants, the exchanges of complementary agricultural produce resulting from the two ecological slopes (corn from the plateau in return of products from the baiboho of the Onilahy river: fruits, sugar cane).

Another type of collective agreement, such that of Anjahambaky on the north-western part of the plateau, was intended to regulate the agro-pastoral practices and behaviours between resident groups of a dense and composite population. This favahanam-boly agreement which governs the circulation of the cattle in cultivated spaces calls upon the co-responsibility of rightfull allocatees of a parcell, including those which do not have animals: monitoring the fields, temporary keeping aside the animals, obligatory crossing of the cattle on given paths. Let us note that this agreement is far from being recognised by all Tagnalana recently arrived in the zone, and badly accepted tompon-tany tanosy which however granted cultivation rights to them.

The prevention and the fight against theft of animals are also object of many agreements organising a precise grid of ways, stipulating a permanent duty of monitoring and control of the passing of the animals on the part of territory for which one is collectively responsible^[11]. A local dina of this type ratified by titike between the fokontany of Vatolatsaka, Besakoa and Anjahambaky takes again the principle, usual in the most southern part of Madagascar, of shared responsibility and of direct popular justice present in the existing regional dina (cf infra) to which it is always refered, at least in a tacit way.

Dina of regional extension apply more specifically to the agriculture animal farming relationships and the theft of animals, and their influence in the southern areas was linked - in one more prosperous period - with the possibilities of capitalisation in cattle. Since the Seventies and four twenties it is not possible any more to apply the heavy penalties initially envisaged, doublement of the number of cattle to be refunded with the Convention of Sakaraha, three times over with that of Tuléar whereas their field of competence was formally extended to the areas or districts surrounding to try to entreat the recrudescence of the thefts.

Some dina, typical by the precision of their articles, could be regarded as true charters of individual behaviour and of common life. The 1958 convention known as Mandabe Convention enacts successively the rules and the sanctions concerning the theft (animals, goods), governs the complicity of concealment, the trade of cattle, the mode of residence and the circulation of people and animals, the prohibition of cultivation of the rangelands, the procedures of appeal to higher authorities etc. Even if the pregnancy of the former colonial authority is strong, this dina is characteristic of the will to keep a collective control on the whole of the activities undertaken within assigned spaces, will that one finds more or less in the majority of the particular local agreements.

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Gouvernance and patrimoniality, bases for a viable management of the resources?

The modes of coordination and control of the resources by the populations in the area of Belomotra thus show essential assets but also significant abnormal operations which have value of example-type for those which would wish a more undeniable legitimacy of the systems of environmental control.

The operational force of the decision in rural environment, its legitimacy and its acceptability by the members of the community, depend on social cohesion (statutory relationship, inter personal relations, standards of behaviour) and on the system of tacit or explicit values of the group. The socio-economic regional dynamics (migratory displacements, agriculture mobility, work opportunities downtown, impact of the markets) in which are involved the rural societies

however does not allow to personalise the social relations, essential condition of a minimal control of the play of the actors on a coveted natural environment. Individualism and increasing insertion in the networks of clientelism facilitate the illicit access to the spaces already allocated without fearing to break the existing allowances. Moreover the representativeness of the new migrants and foreigners is not assured since it is the village social organisation itself which authorises the access to information, the mode of participation in the public meetings and the exercise of the responsibilities.

The multiple forms of coordination on the village and extra-community scales and the stretching of the network of information generates, if one wanted to retain only their allocative efficiency, of the high costs of operation. If proposals for a management of resources can be made within the framework of viability also integrating social purposes, they must be based on two complementary concepts, those of governance^[12] and patrimoniality^[13].

The first which stipulates the widened participation of the groups and the rural communities legitimately concerned with the resource management requires the free will and the freedom of access to information. The second expresses the idea of a functional dependence between man and natural environment, of a responsibility towards the resources whose assignment must be the subject of an qualitative and temporal arbitration (standard of use, use or disuse) and the allowance subject of a social arbitration (between contemporaries and the present and future generations).

The aim is that of building a representation excluding none of category of actor^[14] and outcoming to «the setting-up of a patrimonial organisation defining: physical and institutional places of negotiation and management; accepted languages adapted to the contents of the problems to solve; rules of management and negotiating procedures aiming at the redefinition of these rules» [H. Ollagnon, 1991]. If criteria of global «valorisation» of spaces resources take into account the concerns of the populations, they will have to integrate, in the light of local realities:

- the multiple purpose of spaces making profitable the complementarity of various resources;
- the organised multiple use of the resources allowing the temporal alternation of uses depending on the state of the resource;
- the evolutionary assignment of the resources according to the ecological upheavals and the productive capacities of the environment;
- the collective allowance, co-responsibility to develop patrimonial solidarity on a common space;
- the subsidiarity allowing the delegation of powers, the burden-sharing of management, regulation and control.

These points which constitute the focus of the current research associate the institutional approach undertaken for one decade^[15] with Madagascar with the comprehension of dynamic and constraints facing the local rural communities.

Bibliography

Barrière O., Barrière C. [1995], Le foncier-environnement. Pour une gestion viable des ressources naturelles renouvelables au Sahel. 1: Approche interdisciplinaire dans le delta intérieur du Niger (Mali); 2: Répertoire des conflits fonciers du delta intérieur du Niger (Mali); 3:

Index ethnobotanique des espèces du delta intérieur du Niger (Mali)., ORSTOM-CNRS, Programme Environnement. 3 vol., 517p., 400p., 72p.

Commission Française du Développement Durable [1998], Eléments de Glossaire du Développement durable. Document de travail / Groupe de travail "Emploi et développement durable", CFDD, Paris.

Fauroux E., Rakotosalama J.A. [1993], Le Développement de l'Elevage dans le sud-ouest de Madagascar. Etude d'identification intéressant quelques domaines du projet Elevage Sud-Ouest (groupements d'éleveurs, distribution de médicaments et de vaccins, recherche)., ERA CNRE/ORSTOM Tuléar, rapport de faisabilité pour le compte du projet DELSO, 61p.

Ingold T. [1992], "Culture and the perception of the environment", in Croll E., Parkin D. (eds), Bush base: forest farm. Culture, environment and development, EIDOS, 1992, pp. 39-54.

Ollagnon H. [1989], "Une approche patrimoniale de la qualité du milieu naturel", in Mathieu N., Jollivet M. (eds), Du rural à l'environnement: la question de la nature aujourd'hui. Association des ruralistes français; Colloque "La nature et le rural", ARF, Strasbourg 1986; L'Harmattan, Paris, pp. 258-268.

Salomon J.N. [1978], "Fourrés et forêts sèches du sud-ouest malgache", Revue de Géographie de Madagascar, n° 32, pp. 19-39.

Glossary

- baïboho: alluvial or low soil on which is practised the fall culture
- dina: agreement established between neighbouring populations in order to manage problems
- fatidra: blood fraternity between two people without kinship
- favahanam-boly: engagement between farmers
- filongoa, longo: relationship, parent; ceremony of acquisition of relationship
- firaisana (canton, then district): former denomination corresponding to the minimal level of territorial administrative organisation gathering several fokontany; replaced now by the term kaominia (the commune, rural or urban);
- fokonolona: village assembly; in the beginning social groups coming from the same foko.
- fokontany: village territorial institution gathering several hamlets; legalized in 1973
- hazomanga: ceremonial post of the clan or the lineage set up in a village
- mpanarivo: parvenu; rather pejorative term to designate a rich man, generally out of oxen
- mpikabara: which can speak during the meetings
- mpisoro; mpitoka hazomanga: sacrificator and head of lineage group which holds the hazomanga
- ombiasa: soothsayer-guérisseur, privileged mediator between Surnature and the living people
- ray amandreny: wise of the village, people respected because of their age and experiment
- titike: solemn ceremony of collective engagement (alliance, non-aggression...)
- toets-aombe: «the place where cattle is hold»; lineage pastoral territory including rangelands, parks, water points and settlements
- tompon-tany: descendants of the first occupants of a particular area or territory, masters of the land, mediators for the access to the natural resources
- vakin-mitovy: oral convention
- ziva, mpiziva: nonbiological relationship, joke fraternity

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- [11] This exploratory analysis rests on field investigations carried out during two short missions in April-May and November-December 1998.
- [12] The area of Anosy, confronted at the end of XIXème century to the vicissitudes of the colonial power and the merina incursion; the instability of the political regime as from 1971 particularly with the insurrection tandroy, mahafaly and tanosy in the southern part of the country.
- [13] The ranofoty evokes the brutal pejoration of the potentialities on arable lands after a particularly catastrophic rain season; it would seem that the phenomenon appeared several times during this century, the last occurred in 1978 in the south with the cyclône Angèle.
- [14] The malagasy terms used appear in the glossary at the end of this text.
- [15] Land space is built by stages and in partially encased levels; a simple scheme of the system of appropriation could distinguish:
- the initial allowance (collective) of a delimited space;
 - the collective basic assignment with territorial zoning of the different uses considered;
 - the community allowance, «reserved field» of given assignment;
 - the individual allowance, distribution between families, lineage groups, in each zone (distribution of parcels in the ricefield zone...)
 - the autonomous personal assignment or under-assignment under constraint;
 - the dependent allowance (plotting, borrowing, farming by the tenant) etc.
- [16] In a northern part of the plateau, a tanosy pastoral territory, a fate would have involved on several occasions the death of the inhabitants of the place of culture and settlement of Ansely.
- [17] The temporary authorization of settlement in the southern part of the plateau granted by Tanosy to the tagnalana migrants engages responsibility for monitoring the cattle: the foreign allocatee, who in this area fears to preserve his cattle with him, is obliged to take part like others in the pursuit of the cattle in the event of theft.
- [18] Two cases can give illustration of it. An elder mpanarivo member of a tompon-tany lineage group of the village of Fagnato, holder of a licence of «cleaning» obtained from the E&F bureau on a territory dependent on several village communities, distributes and takes again the land with its own way, playing of the competitions between ethnic groups. In forest of Anzado a bara accomodates and grants mahafaly migrants on his temporary allotment, without aval of his tanosy fatidra, of the under-allowances of parcels of more than 30 hectares of corn.
- [19] In our study area a first GELOSE contract, set up in June 2000, envisages the coadministration of the forest of the 7 Lakes by two villages, in particular for ecotourism. The inter-communal structure of concertation (Tongobory, Ambohimahavelona, Andranovory, Vatolatsaka), is as for it in charge especially to arbitrate between projects of development of the area: rehabilitation of roads, creation of drillings, construction of small dams, rehabilitation of waste lands. In spite of some lawful attempts it has no competence in environmental management.
- [10] Let us quickly quote the mpikabary, members of the recognized lineage groups of which they ensure the representation; the heads of household; the mpisoro, elder representative of a lineage group and holder of the hazomanga whose ritual office allows the primitive installation of the group on the territory, primarily consulted for any land allowance; the «wise» ray amandreny being able to intervene as conciliator or mediator; mpanarivo, considered for their dominant economic position and their undeniable presence in many fields of the negotiation and the decision at the village level; the ombiasy, in charge to lead the socio-religious rites of

the group, the propitiatory incantations to guarantee good harvests, intervening in the assignments, the control and the distribution of the agricultural or pastoral activities.

[11] Space exclusivity and presumption of responsibility (and of fault) can be strong enough to require a penalty (in addition to reimburse for the same amount of animals) if a valid proof justifying the loss of the traces cannot be brought: crossing of water, passage of the rain or the grasshoppers, etc. The sanction and methods of assessment comprise alternatives, in particular about the compensation to be poured, but their application is difficult even impossible if the parties in question are already in conflict.

[12] «Good governance», «combination of elective democracy, participation of the citizens and rational approaches of the decision based on indicators and evaluations» [CFDD, 1998], poses the fundamental exigence of the transparency in the decision-making process.

[13] Meant as «unit of material and immaterial elements which concur to maintain and develop identity and autonomy of its holder in time and space by adaptation in evolutionary field» [Ollagnon H., 1991].

[14] Non native migrants are particularly concerned here like other categories of actors: women and age groups in particular.

[15] The GELOSE institution is without any doubt the current spearhead as regards to decentralization of management of natural resources. It profited with sectoral expériences concerning the transfer of responsibility, in particular the Gestion Participative Forestière (GPF), which in return introduce mechanisms of land securisation borrowed to the SFR, Sécurité Foncière Relative, disposition introduced by the 1995 outline law [Cellule ONE/Gelose, oral communication].