

Water Rights and the Processes of Negotiation among Irrigators in West Shewa Zone: The Case of Indris Irrigation Scheme in Toke Kutaye District

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Abstract

This paper scrutinizes water rights and the processes of negotiation among irrigators diverting water from Indris Scheme. The scheme marked three phases in its historical development. Multiple water use rights reflecting the theoretical orientation of legal pluralism have co-existed governing the behaviors of users. Conflicts have been attributed to institutional malfunctioning, weak observance on water right rules and increasing statistics of users. Negotiations have been initiated to settle conflicts. The formulation of water guidelines stipulating specific irrigation water use entitlements, awareness building, promotion of negotiated approaches, and enforcement of customary rules constituted the dimensions that seek meticulous consideration in prospect.

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Background

As depicted by Dessalegn (1999:10) and Woldeab (2003:25), irrigated agriculture, complementary to the conventional rain-fed agriculture, has a history of more than one century in some parts of Ethiopia. Publications by research institutes like FAO (2005) attested the inclination to promote irrigation schemes has been triggered by the recurrently occurring droughts and worsened food insecurity situations. For instance, Tsegaye (1991:2) has denoted that though irrigation developments were taken to be among optional mechanisms to cope with the prevailing poverty conditions, productivity through such systems has failed to meet the anticipated targets being constrained by multiple factors. Likewise, studies by Mokonnen (1992; FAO, 1978; Lemma, 1994) all underlined that mismanagement of irrigation practices could result in disputes, soil salinity, water logging, and canal seepage thereby exposing people to various diseases. More recently, Robel (2005), Girma (2006) and Seleshi *et al.* (2008) have discussed causes of underperformance in irrigation which is attributed to technical and institutional problems.

In Toke Kutaye¹ District where this research endeavored to scrutinize water rights and the processes of negotiation, several irrigation schemes have existed. Indris Irrigation Scheme is among the scaled up ones located at a distance of 2 km south of Guder Town. Initially, the scheme had been operating in an indigenous manner; it was promoted into a modern system in 1986 EC with the financial assistance of European Economic Commission.

Despite access to water use rights and successful processes of negotiation over irrigation, water constrains the development of the practice in numerous regards; such notions have been given negligible credits and overlooked by scholars and other institutions. Problems stemming from three dimensions are apparent in connection to Indris Irrigation Scheme. In the first place, some researches have been conducted on the historical development of the scheme. The prevailing data regarding its historical background were not only scanty but also presented in a contentious way among the water users themselves. Secondly, what falls at the hub of resource exploitation comprises issues of the right to hold it permanently or transfer it to others. The third dimension is about the competition of users

over irrigation water, associated conflicts and the successive chains of negotiation processes held to avoid disputes.

As a result, the purpose of the paper is to examine water rights and the processes of negotiation among irrigators diverting water from the Indris Scheme in Toke Kutaye District of West Shewa Zone. More specifically the paper looks at:

1. The phases in the historical background and development of Indris Modern Irrigation Scheme;
2. The nature of water rights and processes of negotiation;
3. The rules governing water use rights, distribution and management aspects;
4. The role of factors like gender, economic status and power in the decision processes;
5. The significance of water rights and negotiation in livelihood improvement; and
6. The conflict settlement mechanisms pursued by water users in the area.

To address the indicated objectives, a qualitative research method was largely employed to gather first hand data. Hence, interviews, observations, and focus group discussions were used as principal methods of data collection during the field work². To envisage certain themes with deeper insights with their naturalistic settings in the field, photography has also been used. As a whole, 53 households were contacted for interviews and 21 individuals took part in the focus group discussions.

Secondary sources including books, journals, research papers and official records were reviewed to corroborate the data obtained through primary means.

Description of the Study Settings: Irrigation History in Brief

Indigenous irrigation systems are believed to operate since time immemorial in various sites of Toke Kutaye district. Information extracted from the district agricultural desk revealed that more than 25 major and minor rivers have been diverted for irrigation purposes. While the indigenously operating irrigation sites in the district make up six, the modern schemes make up eight in total. All the schemes that are irrigated through indigenous or modern techniques have fallen below or equal to 200

hectares, excepting the Indris Scheme which covers more than 200 hectares. According to Dessalegn (1999:10) and Seleshi *et al.* (2007), classification of irrigation schemes depends on their size, operation and management. The irrigation schemes pragmatically functioning in the district can be categorized as small scale category while Indris modern irrigation scheme falls under the medium category.

Rural households from five peasant associations (namely Imela Dawo, Dale Dawe, Ajo Bedo, Dhaga File and Kilinto) have been involved in the diversion of water from the Indris Scheme. In addition, institutes like Agricultural Training Center³, schools and Hormat Engineering Factory claimed water for irrigation and other usages from the scheme. Through comprehensive discussion held with committee members, development workers and experienced elders, three irrigation sites were selected out of five (5) peasant associations. These sites are found in Selam Sefer, Dhaga File and Kilinto. The Agricultural Training Center was also included in the study as there have been frequent conflicts between the farmers and the training institute. The sites were selected mainly because:

- a. Their geographical locations represent the upper, middle and lower categories of beneficiaries. Selam Sefer and the Agricultural Training Centers were selected from upper users, while Dhaga File represents middle users. Kilinto is from the lower tail of the scheme.
- b. Both Holeta and Bako Agricultural Research Centers have conducted pilot demonstrations repetitively and constructive lessons can be extracted.
- c. There are larger concentrations of experienced irrigators in the sites.
- d. Easier accessibility for transportations and fieldwork - nucleated settlement pattern was observed in their respective settings.
- e. The social dramas heard over water use rights among the sites themselves or between the sites on the one side and the Agricultural Training Center on the other hand created a passionate feeling in the researcher's understanding to offer priorities for these sites.

An Overview of Scholarly Sources and Theoretical Frameworks

Rendering rudimentary views, Cernea (1991:43) has succinctly underpinned that socio-anthropological issues are embedded in the operation of all irrigation systems, small or large: people organize socially in order to

secure water, transport it, divide into usable shares, enforce rules for its distribution, pay for it and dispose of unused portions.

Stating a decisive proposition, Vermillion (2000:57) quoting (Arriens *et al.*, 1996; Secker, 1996), (Blank *et al.*, 2002:113) and FAO (2005:5) asserted that with rising population and diversified economies, competition for water is rapidly intensified in many developing countries, especially in Asia. Such conflicts over water resources are further aggravated by the social inequality, economic marginalization and poverty.

Insisting on a typical case, Blank *et al.* (2002:123) have also explained the multiple sources of conflict over water use in the Upper Ewaso Ng'iro North Basin of Kenya, attributing to causal factors linked with water scarcity, inequitable water allocation and distribution, and failure to observe water by-laws.

Sharing the same point of view, Barrow (1987: 70) contended there is a recurring claim that laws and traditions controlling water use in developing countries are often inadequate, unsuitable introductions, ignored or unenforceable. Fair, rigorous and swift enforcement is important in maintaining or improving adherence to water use laws and rules.

In their endeavors to characterize water rights, Bruns and Meinzen-Dick (2000) denoted that water rights are not just an analytical abstraction. The term water right is broad including diverse kinds and levels of rights. Clearing it, Boelens and Davila (1998:87) have described water right as social relationship among humans and not only between the user and the water; thus, they are rooted in the other components of the peasant community's normative system.

To illustrate the possible ways of securing water rights, Cotula (2006: 10) argues that "water rights comprise formal rights embedded in official titles, permits and seasonal irrigation schedules, less formal rights based on customary patterns and rights implicit in social norms and local practices." Elucidating the diverse levels of water rights on a given specific source, Bruns and Meinzen-Dick (2000: 203) have indicated that ownership rights, rights to participate in decision making processes, rights to use without rights to participate in decision making process, rights which may or may

not be transferred, rights to use only for a specific season or purpose, individual rights and community rights constitute the most commonly recognized cases.

According to Boelens and Davila (1998: 29) there may be multiple bases for water claims. The two most widely recognized doctrines for water right are based on ownership or possession of land along rivers, streams or over aquifers (riparian rights⁴) and claims based on historic water usage (prior appropriation⁵). Broadly addressing the same theme, Meinzen-Dick and Nkonya (2005:5) underscored that water rights can be broadly classified as public, common, or private property.

Providing a highlight on the negotiation processes in water right claims, Bruns (2005: 1) uncovered that rights to water may be negotiated in many contexts and strategies including direct actions to acquire more water and restrict others' access; litigating in court; participating in planning and other formal administrative procedures; lobbying their case to the public and trying to reach agreements with other water users are all part of negotiating rules about who should get water.

Gulliver (1979) argues that negotiations are vital to reconcile conflicts among diverse interest groups over resource use. As he puts it,

Negotiation involves interaction between different claimants, not unilateral decisions made in isolation. It includes sitting around a table to craft an agreement, formal trading arrangements as well as less visible struggle over access to water, as local people comply with or contest the ways in which state agencies or other users acquire and distribute water. Thus, agreements may mark major milestones, but usually lead to further negotiation about how the agreement is to be worked out in detail, how to monitor compliances and respond to violations, and whether to revise agreements (Gulliver 1979: 79).

Further enriching their concerns on the likely predicaments of negotiations over water rights, Meinzen-Dick and Pradhan (2006) argued that water rights are dynamic, flexible and subject to frequent negotiations because of uncertain water supply, damages to intake structures, and social, political and economic changes.

In the Ethiopian context, studies directly conducted on water use rights or processes of negotiations over irrigation water have appeared scanty. In addition, policies, legislations and rules issued in connection to water rights have also been far from satisfaction. Reflecting on a comparable view, Yacob (2002) contends that in Ethiopia there does not seem to be a single body of rules pertaining to the rights of use and management of water resources which holds grains of truth for water competitors in the Waiyto Valley of Southern Ethiopia where his study offered a greater focus.

In a similar vein, Zewde (1994:88) has also explicated that there is no extensive legislation covering the use of water in Ethiopia. But, there are decrees that water is a national asset and that it can be controlled only by the central government. Furthermore, studies conducted by FAO (2005), reaffirmed that written information on water use is not available.

On his part, Lemma (2004:50) found out that there is no policy in the region⁶ as a whole that deals with water right and entitlement. Presenting a more compromising ideas, Ewnetu (1987:1) depicted that in Ethiopia enacted water rules appeared recently, but prior to this the people were using customary rules which are observed even today in many parts of the country.

Currently it is evident that the Ministry of Water Resources (MoWR: 1999) has formulated a water policy embracing the irrigation component both at Federal and Regional levels, basing on the Agricultural Development Led Industrialization Policy (ADLI) of the country. The overall objective of the policy is to develop irrigated agriculture for the production of food and raw materials to agro industries.

In an attempt to coin out specific guidelines correlating with the policy document, at Oromia regional state level a proclamation (No.30/1999) was enacted in order to reinforce the tasks of the Oromia Irrigation Development Authority. In the proclamation, the duties and responsibilities to be assumed by the authority with regard to how best to use water were somehow indicated.

Associating with the policy environment, McCornick and Seleshi (2004) have offered a comprehensive remark on water use rights in Ethiopia as follows:

The relevant policy and legislative framework must continue to be strengthened and allowed to evolve to accommodate the indigenous arrangements and established water-rights, and meet the new demands. The recent improvements in the national water policy framework has established the necessary foundation, and there is some evidence that communities are playing a more active role in the decision making with regards to allocation and management of water at the local levels, allowing for better integration of indigenous water rights and management systems (McCornick and Seleshi, 2004:8).

Theoretical Frameworks

The central arguments of two essential theories, i.e., legal pluralism and processual models of negotiations were utilized as the theoretical stands to analyze the basis of water right claims and the processes of negotiation discerned around Indris modern irrigation scheme.

Legal Pluralism

In their interpretation of the conceptual frameworks of legal pluralism, Burns and Meinzen-Dick (2000), Meinzen-Dick and Bakker (2001) have noted that legal pluralism begins from the recognition that multiple legal and normative frameworks coexist. The theory has depicted the perspective of people's experience with water access and control in which individuals draw up on a range of strategies for obtaining irrigation water. Thus, government, religious and customary laws, development project rules, and unwritten local norms may all address who should receive water, from which sources, for what purposes. For that reason, the conceptual framework of legal pluralism has become indispensable to explore the different conceptualization of water rights and the variety of legal statutes attached to it around Indris Scheme.

Processual Models of Negotiation

According to Gulliver (1979: 82), negotiations have involved two distinct but interconnected processes going on simultaneously: a repetitive, cyclical one and a developmental one. The cyclical process comprises the repetitive exchange of information between the competing parties, its assessment, and the resulting adjustments of expectations and preferences while the developmental process involved the movement from the initiation of conflict to its conclusion leading to some outcomes with its final implementation. Hence, the elements of the processual models were chosen to be instrumental in the analysis of the processes of negotiation that water users pursue to settle conflicting interests while diverting irrigation water in the study settings selected for this research.

Ethnographic Accounts: Findings and Results of the Research

Historical Background of Indris Scheme: Phases of Irrigation Development

The investigation on the historical background of Indris Scheme demonstrated its development in three distinctive stages: pre-conditions in the initial phases (prior to 1972 EC), operations in an indigenous manner (covering 1972 to 1986 EC) and conversion into modern style (post 1986 EC).

Regarding the first chapter of irrigation development around Indris River, as confirmed by the participants of the focus group discussion held at Selam Sefer, the practice was introduced alongside with the introduction of the grinding mill technology and carried out on small pieces of land being confined only in gardens. As a result, the production was only to complement household consumptions connoting that market orientation was quite negligible. In fact, the vegetables and fruits planted were also limited in variety.

In the second phase, the completion of digging the web of canals and building up the indigenous dam that lasts only during the dry season marked a momentous shift in the historical development of the scheme in several respects. Pertinent changes embrace remarkable increase in the number of water users (up to 250 households), incorporation of larger hectares of land

under irrigation practice (about 180 hectares at its upper limit) and inclination to use irrigated produces both for domestic consumption and market supply. It was also revealed that the formulation of agreed upon by-laws with the technical assistance of agricultural workers and other officials from the desk had reached its maturity.

On a comparative base, only some tacitly perceived normative rules emanating from the broader customary frameworks of the society had guided the actions of water users during the initial phase. Such sorts of implicit normative rules were transformed into more or less written rules being interwoven with some fragmented elements of the prevailing irrigation guidelines. At the same time, the custom of irrigating twice per year had also developed which was missing in the first phase. It was also at this stage that the Agricultural Training Center began to divert water as its second best alternative. Previously, the institute used to divert a substantial amount of water from Chole River.

Along with the noteworthy moves that accompanied the scheme's development, water users have also internalized the wide-ranging merit of irrigated farming. The multifarious consequences of the great changes and the increasing recognition by practitioners, created the motive for the transformation of the scheme into its third phase, i.e., from indigenous scheme to modern system.

Principally, the persisting claim from the farmers' side and the discharging capacity of the indigenous scheme on the other hand happened to be inconsistent to meet the interests of the drastically growing population. The gap grows wider pertaining to the gradual decline in the volume of water. As a result, the water users, the district and zonal irrigation bureaus as well as the Agricultural Training Center initiated a proposal to scale up the scheme. Then, the European Economic Commission (EEC) showed practical interest to donate (around 3.5 Million Birr) for the construction of the modern dam that actually took over two years.

The transformation of the scheme into modern operation has induced further developments besides those noteworthy shifts formerly attained. In the course of deliberations held with the agricultural development agents, it was possible to find out that the command area has grown to cover 7-8 kms. In its indigenous operation, it was possible to reach users within a limited

radius from the source, perhaps not more than 4-5 kms away from the main source. Only sites closer to the main canal got irrigation water sufficiently. Subsequently, the conversion of the scheme augmented the command area by at least 2-3 kms reach.

In addition, the scale of the scheme has expanded from small to medium range. It was about 180 hectares (categorized as small scheme) of land covered through indigenous irrigation techniques that stretched to incorporate about 381 hectares (categorized as medium scale) of land in its current state. The number of water users has also increased from 250 households to 1,020 households.

Coupled with the aforesaid changes, the need to apply environmentally sound and scientifically proved varieties of seeds and seedlings escalate based on the estimations to gain satisfactory benefits. The institutional management systems of irrigation water started to be handled by Indris Water Users Association (WUA). The association was reformed since the aftermath of the transformation of the scheme. Intricacy in the chains of structures and institutions involved in the management, allocation and distribution of water have moved from a state of uncomplicated operations to the level of sophisticated webs of networks directed by the frameworks of Water Users Association. The general assembly of users took its ultimate power to provide decisions for the pragmatic allocations and distributions of water via committee functioning at three levels: Executive, Garee⁷ (team level committees) and Gooxii⁸ (territorial level committees).

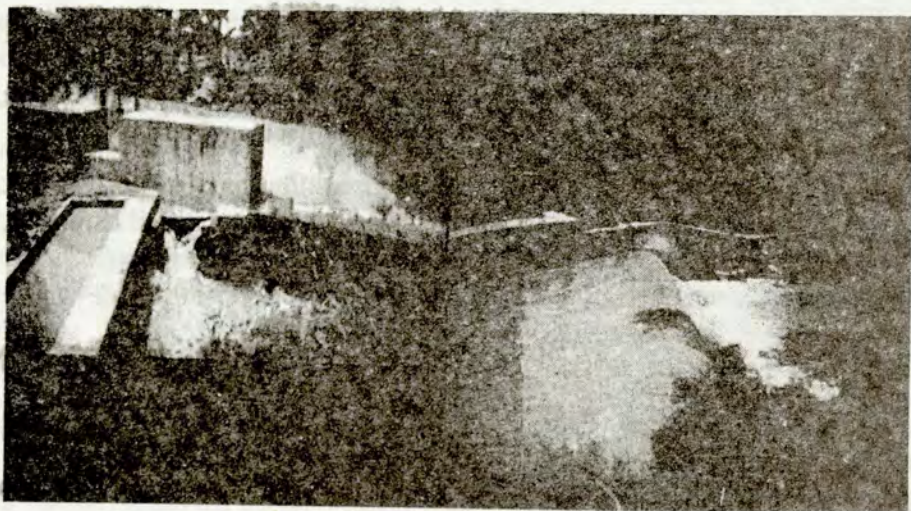
Problems of water scheduling, water misappropriations (in the form of theft or seepage) have become to receive more concern in an integrated approach. Irrigation of fruits and vegetables has inclined to focus on market orientations and demands. In this third phase, production for market supply outweighed household consumption.

A slight modification to the naming of the scheme was also another development. The indigenous diversion was named after the name of the river itself: Indris. The intent behind the new naming has stemmed from irrigators' exclusive dependence on the water diverted from the river. On a meeting of the general assembly, which is of course the highest decisive

body, a consensus was reached to rename the scheme as 'Indris Fayyisaa' which literally means 'Indris our savior'.

The development of the scheme through the three phases was not without costs and constraints. Amongst the factors that attempted to curtail the development of Indris scheme, state of affairs like lack of strong policy basis regarding irrigation schemes has carried immense effects. There was lack of specific directives and guidelines that has affected the realization of pragmatic implementation. Besides, deficiency of financial and technical skills had profound contribution in slowing down the development of the scheme.

Institutional limitations and incapacities prevailing during the three stages of the scheme's development were the other main constraining factors. Nearly in all circumstances institutional matters were either taken for granted or deliberately overlooked as if their effects could pose only miniature consequences. Conflicts of diverse nature (among water users themselves in their vicinity, water users of upper groups against lower reaches, or between water users and other claimant institutes) lingered the developments of the scheme as part and parcel of the entire ongoing system.



Water Rights among Irrigators in the Study Sites: Basics for Decision and Access

The basics for water right access and decision have enjoyed a broader spectrum of land rights, period of settlement in the area, financial as well as labor requirements contributed by users. During the initial phases of irrigation commencement, land right or possession had been considered as a principal factor to create users' access to irrigation water. This coincides with the arguments of the riparian water right doctrine.

During the scheme's full operation in an indigenous manner, historical precedence to the sites had predominantly served as a parameter to decide and secure users' access to irrigation besides land rights. With the conversion of the scheme into modern system, the decisions to admit or deny users' access to water rights has been determined through their labor contributions and fulfillment of obligations imposed by the general assembly. Users were also noted to employ a mix of techniques for creating access to water rights in the form of sharecropping, purchase or contractual arrangements through negotiated approaches.

Informants in the three research villages have indicated that the most essential factors that should be considered as basics for access and decision since the conversion of the scheme into modern style incorporate the age of the applicant (above 18 years old), married, defined residence in the peasant association, and complete registration in the Water Users Association of Indris Scheme. Besides, the applicant needs to hold a portion of land appropriate for irrigation development.

To consolidate their water use right accesses, users have to meet their obligations that are clearly stipulated on the water use manual. The obligations to be met by water users largely revolve around obeying the rules on the by-laws like exhaustive exploitation of potentially available irrigation plots, active involvement on canal cleaning or maintenance, attendance and participation on meetings, and timely completion of financial fees. The financial payments expected from water users basically comprise taxes collected by administrative units depending on the total hectares of land individuals hold, expenses aiming to compensate services rendered by distinct institutions like credit and saving services, payments

imposed on water users as a punishment due to their disobedient acts against the Water Users Association by-laws and annual fees collected from water users for maintenance and operations.

Some impeding factors have suspected to constrict the water rights of users. To depict the highlight of few:

- When the scheme operated in an indigenous manner, water right issues were considered negligible. As a result, the focus of the agricultural desk as well as water users was far from addressing themes on water rights. It has been with growing conflicts, dialogue and violation of rules that water rights got an increasing concern.
- Moderate endeavors on the enforcement of by-laws of the Water Users Association. Weak observations were noticed in the application of directives stated on the manual that in turn lead their implications to carry inconsequential effects.
- The dynamic nature of water rights, i.e., the basic dimensions to be considered for irrigators' water right access has not been fixed. Access to land rights fundamentally determined users' water right during the initial phase of the scheme's development. This was followed sooner with the questions of settlement closer to the water canals, i.e., historical precedence in the area. Recently, the reconstruction of the scheme also necessitates the reformation of irrigators' water right in several regards. For instance, since the promotion of Indris modern scheme, irrigators could get access of water rights plausibly via:
 - i. Inheritances from parents or relatives who had formally established their irrigation water rights.
 - ii. Purchase of the water rights of a given user on the basis of contractual agreements.
 - iii. Water rights secured through share-cropping.
 - iv. Water rights acquired in association with land re-distribution by the government.

The water right rules are multiple in origin and integrative in function. Essentially, the governing water use rules are the combination of customary normative dictations and formal-legal irrigation water management guidelines. These water right rules are inheritable, dynamic in the sense that they would be subject to revisions either for omissions or additions pertaining to the turmoil environment.

Multiple factors have been alleged to hold linkages with water rights either to promote or curtail users' accesses and their participation for decisions. Economic status, power, gender, ethnicity and religion comprised amongst the relatable factors that have in one way or another contributed either to facilitate or deter users' access to irrigation water. Economic status has affected the water rights of users at least as the economically better of,

- Complete a range of tuitions imposed on them on time as compared to the economically weak;
- Can purchase access to water rights through contractual agreements or entering share-cropping while water users in an economically weak position fail to utilize such opportunities; and
- Can develop a relatively strong channel of communication with the committee members, extension workers and other institutes.

Whatever the fashions of its manifestations, power relations have prevailed among diverse categories of users. An institution and individual user through legitimate or illegitimate means try to impose their power disregarding the water right of those in comparably underprivileged positions. The general conception that water flows in the direction of power appears to work. Thus, ill-treated distribution of irrigation water is not only a matter of economic status but also mystification of the power via which the user, households or institutes, define its access. The same holds true for investigation on gender notions where in women are losers and men defined their dominance.

Though not strongly, religious creeds and ethnic background have also carried similar effects. In terms of religious outlooks, for instance, there were occasions when water users in the same church deliberately cover water right offenses committed against users who do not belong to the category. The tendency to sympathize or disregard one another based on ethnic affiliations was only rarely noticed compared to other dimensions. Rather, strong interrelationships maintained through social ties and webs of networks (like burial associations of Iquib/Idir, marriage, extended families, and work/labor parties) worked much more than religious and ethnic backgrounds either in enhancing or deterring the access of users in or out of the aforementioned networks differently.

The actual implementation of irrigation water rights occupied an outstanding place in the contexts to enhance irrigators' livelihood or income expropriated from the practice. Failure to observe the water use rules in general and ones own water right in particular deteriorated users' livelihoods. The cases presented showed users with longer experience of implementing the water right rules have been reported to progressively improve their livelihoods year after year while conversely those reluctant to obey the rules suffer from crisis imposed on them in the form of punishments.

There were few non-irrigators who failed to create the opportunity to divert water from Indris Scheme due to varied reasons. None of the contacted non-irrigators claimed about constraints linked with water rights access or decisions. Rather, distance from the source, decline in the amount of water for the lower stream users (particularly Kilinto site) and geographical barriers for the upper stream users (Selam Sefer) were pointed out as major obstructions on top of other personal matters.

Negotiations and Dispute Settlement over Irrigation Water in the Study Setting

Conflict of competing interests among diverse categories of users is the other dimension to be looked in relation with the water right of users. The results of the field work proved increase both in the frequency and severity of conflicts over irrigation water parallel to the three phases of the scheme's development. Sometimes conflicts broke out among users in a village, along the streams of the scheme or between farmers and the Agricultural Training Center of Ambo College.

The principal cause for conflicts to erupt has been embedded in the transgression of negotiated water use rules like theft, turn abuses, failing to timely pay financial fees or deliberate ignorance of manual works for canal operations and maintenance and gradual decline in the volume of water resource itself. Power abuse has been found to be considered as the second chief factor for conflicts.

These conflicts have been handled at distinct levels within the village through elders and committee decisions, at Kebele courts or at district court. In case these conflicts develop into disputes that stay over a prolonged duration of time, a succession of negotiation process and procedures would

be employed to handle it. The process involved could range from identification of the main causes to the final remarks of disputants that assured their consents on the theme. The conflict between the Agricultural Training Center and the farmers, or users in the upper and lower streams basically exhibited typical instances of protracted disputes.

Of course, negotiations have been carried out in dual senses: negotiations under normal circumstances and negotiations conducted to resolve disputes. In its former meaning, water users do frequently negotiate over a range of issues to be implemented with the supposition to promote the effectiveness of the entire system. These include negotiations executed in relation to a range of fees, stuffs of items to be irrigated, maintenance schedules and labor contributions, total hectares of land to be irrigated or possibly water scheduling days and hours. In the second sense, chains of processes of negotiations would be undertaken successively at times of serious conflicts. Generally, the steps pursued to initiate and finalize the processes of negotiations moves through and covers state of affairs described below;

- i. **Recognition of the grounds of the dispute/ Causes:** at this point the negotiators themselves or the mediators (elders, committee, Kebele or district court) examine the basis of the conflict.
- ii. **Conduct assessments on the prospective points to be negotiated:** having deeply examined what instigated the conflict; either the negotiators or mediators move to sort out the promising arenas wherein negotiation would be set in motion to induce remarkable agreements.
- iii. **Persistent presentation of negotiators' respective cases and points of departure:** the identification of points over which negotiation produces relatively common understanding ultimately pursued by the act of inviting negotiators to present their cases to each other and the mediators in the attempts to persuade the audiences elaborating that their argument contained more reality than their opponents. There prevails the presumption that negotiators who really come up with convincing propositions would gain much from the debate and there is a need to purposively respond to the arguments of their opponents. The presentation of the respective cases of negotiators usually takes much of the time in the entire process of negotiation.
- iv. **Narrowing the gap between the interests of negotiators:** the succession of appointments to heed the respective cases of water users

in dialogue would enable them to easily distinguish the gap in the interests perceptible between either the teams or individuals in dispute. At this instance, the negotiators themselves or the mediators would engage in the facilitation of the negotiation process or suggest the strategies appropriate to successfully resolve their competing interests.

- v. **Provide the final decisions to confirm and attain consensus:** with the minimization of the gap, comes the concrete decision to be accepted commonly by both parties and further materialize the points of consent in prospect.

These steps largely represent the standards pursued by the majority of water users in the studied sites. However, details of the procedures incorporated in each step vary from village to village or depending on the general setting where the negotiation would be conducted. The implications and essential arguments of the processual models of negotiation (both cyclical and developmental) hold coincidences with these processes executed to alleviate the interests of competing water users. In each step of negotiation, as participants of the focus group discussions revealed, there exists recurrent exchange of views. This notion specifically reflects the arguments of the cyclical model of negotiation. The cumulative effects of each negotiation steps finally culminate in generation of the consensus determined. So, the ultimate achievement elicits the attributes of the developmental model of negotiation. The end results of negotiations over water rights assured through repetitive and cyclical processes of both information sharing and learning depicted in each stage enabled users to transform from a state of competing interests to collaborating parties.

Though the decisive aim of conducting negotiation processes have been triggered with the motives to induce a real truce, sometimes the outcomes may not end up the way expected. Hence, attaining encouraging targets becomes a tedious exercise. Instead, it might require additional rearrangements for having chains of negotiations. Anyhow, at the end of negotiation processes, the competing parties or users may gain certain parts of their quests submitted for negotiation though commonly unfeasible to obtain the entire range of their initial pursuits.

Conclusions and Recommendations

Conclusions

Debates over access to water rights for irrigation usage and negotiations have been central among water users and institutions claiming water from Indris Scheme. These debates over water right claims have been mainly attributed to rising competitions over irrigation water, drastic population growth and shrink in the volume of water due to augmented diversion points on Indris River as well as failures to strictly observe rules of conduct for resource use. Disputes associated with use rights, by Ambo Agricultural Training Center, or among the farmers themselves have prevailed in the research sites.

Though the elements of both the riparian and appropriative doctrines of water rights mirror among the irrigators in the study sites, their know-how regarding water right entitlements appeared to be found at a state of immaturity. Themes that focus on irrigation water rights tended to be overlooked under normal circumstances and become sensitive only when the rules are frequently violated affecting the use rights of members. As a whole, water right premises gradually began to receive substantial concerns corresponding to the phases of the development of Indris Scheme.

The theoretical frameworks employed as conceptual tool to explore the water rights and processes of negotiations have proved to be inconsistent with the experiences of other developing nations reviewed in the literature. Hence, both the arguments of legal pluralism advocated principally by Burns and Meinzen-Dick (2000) in water rights paradigms and models of negotiations discussed by Gulliver (1979) were pragmatically apparent in the daily activities of water users in Toke Kutaye District of West Shewa Zone.

Correspondingly, a combination of rules for water rights stemming out of the broader normative rules as well as guidelines formally enacted for irrigation water management were essentially available. In their efforts to reinforce water rights besides rules framed out indigenously, significant reforms embodying the legal environment have been accomplished with the help of Toke Kutaye District Agricultural Desk. While the indigenous rules exhibit the pragmatic contexts of irrigators in their respective vicinities, the

formal-legal approach tends to emphasize the components of irrigation directives adopted by the government to be implemented for inducing change. The arguments extracted from these dual approaches have facilitated the water use right claims and the processes of negotiation among irrigators in the study areas.

In this research, it was recognized that customary rules were particularly effective in negotiation processes while the formal guidelines become strong to reinforce punishments due to poor interpretation or deliberate transgression of rules. However, combinations of these rules appeared to hold wider frameworks of guidance. Therefore, legal pluralism contains much relevance with the existing realities of water users in the three determined research settings for this study (Selam Sefer, Dhaga Fillee and Kilinto).

The arguments of processual models (both cyclical and developmental) of negotiations explained by Gulliver (1979) proved to bear reliability with the way conflicts over irrigation water have been settled or the processes gone through to negotiate and renegotiate for securing access to water. Though these models are thought to work at the same time, the cyclical model applies more to grip minor conflicts erupting out among users or teams in a village. Conversely, the developmental model of negotiation has been utilized to justify the protracted disputes continued over a number of days or a couple of months. The arguments of this model appeared instrumental to reconcile the antagonistic interests of the Agricultural Training Center and farmers as well as frequently occurring disputes among water users at Selam Sefer (as upper stream beneficiaries) and Kilinto (as lower stream beneficiaries).

Suggested Clues

The remarks asserted herein below demand the concerted efforts of interested stakeholders, users themselves, researchers or institutes to contribute their resources (in the form of time, know-how/ technical skills, donations or material supplies) to narrow missing gaps and thereby endeavor for better transformation. Hence, the clues embrace:

- i. The policy pertaining to irrigation water management in general and water right entitlements in particular have been in progress time over time. This investigation indicated the need to further coin out specific

water right guidelines by the relevant organs in an instructive and equally beneficial way for all users.

- ii. The chief stakeholders like the district agricultural desk need to provide special focus on enhancing the awareness level of users about the overall nature of water rights. Formerly, it was confirmed that inadequate attention was paid to programs that create awareness among users about water rights and their obligations. As it promotes the empowerment of users in that regard, there is an acute need to incorporate water right themes in the plans for actions to be implemented.
- iii. There prevailed the tendency to increasingly undermine the role of customary rules and instead forcefully impose legally reformed rules by government organizations. Yet, the customary rules were seen to be more effective than the formally laid directives in numerous respects (for instance negotiations). Hence, emphasis has to be put on advocating the merits and revitalization of customary rules that exhibited the wisdom and cumulative experiences or skills of practitioners.
- iv. The causes of conflict were essentially embedded in failures either to adhere or lose implementation of the negotiated rules of water use. In this regard, the findings of the study have indicated the existence of a serious affair that must be addressed thoroughly. Therefore, water users, technical experts, the institutes diverting water from the scheme or other stakeholders need to work in a hand-in-glove manner to reinforce the practical interpretation of rules on the ground.
- v. In the face of growing population and declining water volume, competitions over irrigation diversion would inevitably increase. Initiatives to supplement water from other perennial and potential rivers (like Heddee) have been proposed by users, the district agricultural desk and the Agricultural Training Center. As the materialization of this proposition would only be realistic with the financial assistance of interested organizations (like European Economic Commission), the study suggests conducting further assessments or searches on the likelihood to assure irrigation water sources in addition to Indris Scheme.

- vi. Negotiated approaches over water rights and other themes in the irrigation system have showed remarkable achievements in inducing common understandings between claimants. Despite its remarkable role to settle conflicts of interests, negotiated approaches have been declining over time tending to carry little credits among users. The study recommends offering particular considerations on collective actions that uphold the enhancement of negotiated approaches over resource use (water). The institutions like Water Users Association mediating the access of users need also undergo periodic restructurings in a way to accommodate the ever growing demands of the users and the ever changing environment.

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Endnote

1. The district is one of the 21 districts in West Shewa Zone. It is a newly reformed district for administrative purposes. Guder, some 12 kilometers west of Ambo town, serves as the chief socio-economic, administrative, political and cultural capital of the district. It is situated at a distance of about 137 kilometers away from Addis Ababa on the Addis Ababa-Nekemte main road.
2. The field work has covered a period of time ranging from March, 06/1999 E.C to April 03/1999 E.C. Preceding the main field work, preliminary field visits were made twice during the months of December and January 1999 E.C. On the first preliminary field visit, the surroundings of Indris Scheme were observed. In the second round, the potential research settings were marked out.
3. The Agricultural Training Center served as demonstration site for Ambo Agricultural College instructors and students. The total coverage of land utilized by the institute for irrigation is estimated to be 12 hectares.
4. A riparian right is attached to land ownership - a user can take up the right to use water at any time even if he/ she had not done so before and to do so affects existing users. The owner does not own the water (as the resource itself can belong to the state or some other authority) but only the right to use it.
5. The appropriative doctrine asserts the first settler or user of water from a stream acquires the right to continue using that portion of water needed for the irrigation of his/her land. Prior appropriation rights may be summed up as "first in time first in right"; the earlier appropriator has a right superior to later appropriator.
6. The region to which Lemma referred was Oromia (Eastern Oromia) where he has conducted his MA research, comparing the case of two schemes.
7. Garee represents a team of 12-15 households according to the division by the ruling Ethiopian government for administration purposes in peasant associations of rural Oromia.
8. Goxxii represents a team of 5-15 Garees in adjacent villages according to the recent classification by the Ethiopian Government for administration purposes in peasant associations of rural Oromia.