Analysis of the potential and problems of new institutional economics for third world development

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Abstract

Purpose – The aim of this paper is to provide a critical evaluation of the potential of new institutional economics (NIE) in third world development.

Design/methodology/approach – The paper reviews various theories under NIE from both conceptual and empirical perspectives. It then reviews the various definitions of institutions and show that institutions are essential to overcome problems of information and uncertainty.

Findings – The review finds that weak institutions can undermine development and hence governments in developing countries should strengthen their institutions to provide greater scope for efficient functioning of markets. Where the market does not work owing to high transactions costs, traditional institutions of collective action and group decision making can work and hence need to be recognised.

Research limitations/implications – The major implications of the paper is that in developing countries, a clear understanding of various institutions such as user groups, inter-linked credit markets, rotational irrigation etc. is needed before they are replaced or modified by other institutions. The main limitations of NIE are that there can be capture by elites of various institutional innovations in rural areas, and that it does not explicitly consider income distribution and uncertainty which are glossed over and hence remain areas for future research.

Originality/value – This paper critically reviews the various institutional environments that developing countries face in addressing development issues.

Keywords Economic development, Third world, Developing countries, Economics

Paper type Literature review

1. Introduction

For much of the twentieth century, there have been concerns about the failure of neoclassical economics to provide a satisfactory explanation for a wide range of institutional conditions commonly found in developing countries. Economists agree that institutional deficiencies are at the root of many economic problems. The focus on markets and the equilibrating process as the main vehicle for resource allocation in neoclassical economics provided very little insight into how economic relationships are structured and how alternative institutional forms contribute to development (Vandenberg, 2002). The literature on development provides evidence of a continuous effort by economists to gain a deeper understanding of the theoretical relationship between institutions and the process of economic development. The new institutional economics (NIE) has been advanced to provide finer theoretical focus by which to analyse the structure of transactions and their governing institutions.

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The NIE provides a framework to understand a wide array of institutions that influence economic behaviour and performance (Williamson, 1985; North, 1990). It delineates the forces that generate and distribute the production of income and wealth of a society by analysing the nature of transactions and their governing institutions. The NIE recognises that the allocation of rights and responsibilities of transactions, depend on the nature of the transaction, costs of monitoring and enforcement, the bargaining position and the relationship between the trading parties. Unlike neoclassical economics, NIE considers institutions to be independent variables in their own right. Policy decisions require a clear understanding of these complex interrelationships that link institutions to the development process.

The objectives of this paper are to:

(1) review the definitions of institutions and the various themes in NIE;

(2) review applications of NIE in developing countries;

(3) examine potential of NIE for development policy; and

(4) identify the limitation of NIE as a new development paradigm.

2. Definitions of institutions

There are several definitions of institutions in the literature which are interrelated. The most common definition of institutions is that they are rules of a society that facilitate coordination among people by helping them to form expectations which each person can reasonably hold in dealing with each other (Ruttan and Hayami, 1984). According to North (1990), institutions are the "humanly devised constraints that shape human interaction" or simply the established pattern of cooperation/interaction in the society which relate to certain aspects of social life. Institutions are created and changed as a result of actions and decisions of rational and self-interested individuals who are, for a variety of reasons, followed by others. North's definition is broader and includes inter- and intra-organisational transacting, legal and regulatory framework and cultural, social and cognitive processes which provide a norm structure to guide interaction. Institutions influence behaviour of people and organizations, by setting specific "rules of the game" (Vandenberg, 2002).

Williamson's (1985) definition of institutions is that " they are the mechanisms which govern transactions and a transaction occurs when a good or service is transferred across technologically separable interfaces." Williamson defined institutions as transactions cost minimising arrangements which can evolve or change with changes in the nature and sources of transactions costs. They are the rules of the game – a set of formal and informal rules of conduct that facilitate the coordination of relationships between individuals and groups. He specifically refers to the make or buy decision analysed in the context of bounded rationality, opportunistic behaviour and asset specificity. According to Williamson (2000), the NIE operates at two levels namely the macro and the micro. The macro level is the set of fundamental political, social, and legal ground rules that establish the basis for production, exchange and distribution. The micro level analysis, also referred to as the institutional arrangement, deals with the institutions of governance. They refer to modes of managing transactions and include the market, quasi-market and hierarchical modes of contracting. An institutional arrangement is basically an arrangement between economic agents that governs the ways in which members can cooperate and/or compete.

The "rules of the game" definition is distinctly different to the other narrow definition where institutions are considered synonymous with organizations. In an organization, the internal arrangements are coordinated by non-market instruments. Analytically, the differences in the two main definitions are significant (Arkadie, 1990). The "rules of the game" definition is important because it supports market activity, efficiency, economic growth and development. Markets are institutions because they embody rules and regulations, formal and informal which govern their operations. However, formal organizations such as labour unions are institutions because they provide sets of rules governing the relationship both among their members and non-members. The crucial question is not how the definitions differ or not but the economic efficiency and distributional features of institutions (Nabli and Nugent, 1989). Institutions can be formal and informal. Members of the formal sector constrained by a set a particular institutional set of rules confront a different set of transformation and transactions costs than those faced by members of the informal sector. According to the NIE, it is these differences in the transformation and transactions costs associated with formal and informal institutions that give rise to their importance for the development process. The NIE directs attention to the critical relationship between the rules of the game that constrain human activity and the process of economic development.

3. New institutional economics

The NIE is an overarching paradigm where economics has expanded to other social sciences, primarily to law, politics and sociology and hence has several strands or branches. North (1990) pioneered the new economic history in an attempt to explain how economies evolve and develop through time. NIE is regarded by most economists as arising from the work of Ronald Coase (Williamson, 1985). Others supporting the NIE are North, Williamson, Alchian and Demsetz. In NIE, some of the unrealistic assumptions of neoclassical economics such as perfect information, zero transactions costs, full rationality etc. are relaxed, but the assumptions of self-seeking individuals attempting to maximize an objective function subject to constraints still holds.

NIE acknowledges the important role of institutions in economic development. It provides powerful insights into how institutions are created, their evolution over time and their efficiency and distributional implications. The theory argues that those active individuals carefully and rationally evaluate expected costs and benefits of any change in operational rules. Institutions are created when the benefits expected by principal actors from new rules of cooperation outweigh the transactions costs of doing so (Ostrom, 1990). Many issues such as transactions costs, collective action, organization theory, limitations of the rationality of human behaviour, interest group formation, public choice etc. have all coalesced to form the NIE (Williamson, 1975, 1985).

NIE is analysed with reference to a number of well-defined concepts namely bounded rationality, asset specificity and opportunistic behaviour. Williamson (1985) developed his ideas in relation to industrial development in the developed countries but the basic principles are applicable to the developing countries. Williamson emphasises the importance of transactions costs as the determinant of institutions. Other theories focus on collective action. In institutional economics, institutions are considered to be independent variables in their own right, limiting individual behaviour. Differences in institutions are the primary reasons for differences in economic performance.

Institutions are considered weak in the developing countries undermining the development potential of nations. NIE overcomes some of these critical limitations and provide a rationale for the existence of a wide variety of institutions in the developing countries. NIE has several themes the most common being the transactions cost, collective action and property rights approaches, which are discussed below (Nabli and Nugent, 1989).

3.1 Transaction costs approach

Coase (1960) introduced transactions cost into modern economic analysis. Transactions cost economics adopt transactions as the unit of analysis (Williamson, 1975, 1985). Transactions costs cover a wide variety of costs, which are normally assumed away in standard economic analysis. They include search and information cost, bargaining and decision costs, and policing and enforcement costs. Some identify information costs, risk costs, waiting costs, and the cost of retailing or using a middleman (Hira and Hira, 2000). Vandenberg (2002) refers to the costs of specifying what is being exchanged and enforcing the subsequent agreement. In other words, it is the cost associated with economic exchange. NIE considers understanding of the process of economic development in terms of both the costs of transformation of inputs into outputs and the costs of exchange, namely transactions costs. It is concerned with identifying appropriate institutional arrangements that can counteract perverse incentives inherent in various transactions situations.

Coase (1960) underlines the important role of transactions costs in the organization of the firm and other contracts. He explains that firms emerge to economize on transactions costs of market exchange and that the boundary of a firm or the extent of vertical integration will depend on the magnitude of these transactions costs. Williamson (1975) focused on the conditions under which transactions are organised in an integrated hierarchical manner and in an arm's length contractual manner. Williamson (1975, 1985) focused on asset specificity, bounded rationality and opportunistic behaviour by contractual parties as determining the organisational form. Where there is asset specificity, bounded rationality and opportunistic behaviour, hierarchical approaches are used to govern transactions.

Bounded rationality developed by Herbert Simon implies that decision makers cannot process all available information in making decisions owing to limited mental abilities. Bounded rationality is relevant to situations where the environment in which one works is more complex than their mental abilities. Bounded rationality contradicts the neoclassical notion that individuals are able to undertake all necessary computations to reach a decision to maximize utility. Because the information processing capabilities of humans are limited, individuals make decisions without considering all possible alternatives and their outcomes (Dequech, 2001). Many individual decision makers adopt satisficing strategies rather than an optimising strategies. According to Simon (1957), human behaviour is intendedly rational but only limitedly so[1]. Organizations compensate for this limitation by assigning each individual a limited task environment and standard operating procedures. Bounded rationality can lead to opportunistic behaviour (adverse selection, moral hazard, shirking and various forms of strategic behaviour) in dealing with others.

A related issue is incomplete information and asymmetry of information, which are costly to correct (Williamson, 1985). These costs include ex ante search costs to avoid

adverse selection and ex post monitoring and enforcement costs to reduce moral hazard problems (Sykuta and Cook, 2001). Institutions evolve in order to economise on bounded rationality and minimise opportunistic behaviour. It seeks to understand the interplay between institutional factors and a market and non-market exchange under positive transaction costs.

According to North (1990), institutions evolve to lower transactions costs and are the key to the performance of economies. The theory of induced institutional innovation and the induced technical innovation belong to this school of thought (Ruttan and Hayami, 1984). Governments in developing countries can change the nature and role of transaction costs thereby increasing the potential of existing institutions. Institutions differ only by virtue of their transactional and information costs and critical evaluation of their nature and sources provide mechanisms whereby both can be employed to improve economic performance

3.2 Theory of collective action

Collective action approaches explain the success or failure of a given set of self-interested individuals undertaking collective action, for example, for the management of common property. Common property is considered as a source of market failure in neoclassical economics. Hardin (1964) suggested that issues related to private property cannot be solved through common property approaches because the individuals benefit from the common property but the costs are not internalised and hence the group pays the full cost of the individuals' behaviour (Demsetz, 1967). Policy prescriptions that emanate from this scenario are either the imposition of private property rights or external intervention to strictly enforce rules that reduce common ownership problems. Governments have taken increasing responsibility with the mistaken notion that these resources are mismanaged by local communities. NIE shows that conditions exist where traditional institutions can regulate the use and management of common property resources successfully. Hence, the "tragedy of the commons" as a metaphor for common property management is not universally accepted (Runge, 1986; Ostrom, 1990; Bromley, 1992).

Collective action is viewed in a positive light by many institutional economists. It is a useful tool to analyse how to overcome the free rider problem and come up with cooperative solutions for the management of common resources or the provision of public goods. It is therefore useful to extend a theoretical framework that identifies the key attributes shared by collective action situations in a wide diversity of situations. According to Olson (1982), the success of collective action is related to the homogeneity of the groups. Features such as the size of the group, purpose and the similarity of group characteristics, their goals and incentives may foster cooperative behaviour. Work by Ostrom (1990) and others have shown that local institutional arrangements including custom and social conventions designed to induce cooperative solutions can overcome the collective action difficulties and help achieve efficiency in the use of such resources (Nabli and Nugent, 1989).

Runge (1986) argues that common property resources have clearly defined boundaries, owned and controlled by a clearly defined group. Here individual members have rights to use the resource based on rules and norms of appropriation and will exclude non-members from any claims to benefits from it (Bromley, 1992). These rules and endogenous authority systems that sanction rights and enforce rules provide

the common property users assurance about the expected behaviour of other users, that encourage individual members to cooperate towards a group strategy (Runge, 1981, 1986). If they pursue an individual strategy, rules can be used to arrest such tendencies. The institution rules provide certainty about the expected actions of others. Most natural resources in developing countries have common property characteristics, and can be effectively managed by generally accepted community rules, regulations and sanctions.

Runge (1986) formally analysed common property using a prisoner's dilemma game, where collective decisions produce outcomes harmful to the group as a whole without intervention by some higher authority (Table I).

As Table I shows, cooperate or defect are options open to the two prisoners. An optimal solution may not emerge because each has sufficient incentive to defect whatever the other does. Rational decisions by both makes them worse off. The non-cooperative pair $(-1, -1)$ is an inferior Nash equilibrium. According to Runge (1986), however, the joint use of a common property is often not a separable decision. Externalities enter into the cost function of the other in a multiplicative manner. When externality costs are not separable, then conflict will be the exception rather than the rule. Agreements made have no incentive to defect. This theory supports cooperative models over privatisation. Privatisation is too simplistic a solution for heterogeneous, traditional societies (Runge, 1981). The conventional model ignores the insurance characteristics of common property in rural areas. The "Assurance approach" argues that under specific conditions, people will cooperate for their common good without provision of external (state) coercion. AP analysis suggests that if everyone in a group of collective owners is assured that a critical mass of others will obey a common property arrangement, then it is in each person's interest to do likewise.

Runge (1986) states that where a community has low incomes, is critically dependent on a local resource base, and at the same time faces a high uncertainty with respect to those resources, collective forms of management are likely to emerge because they are cost effective and efficient in allowing temporary access to others resources acting as a safety net. The more homogeneous a community, the more likely that the optimal outcome is communal management, since people will share similar economic goals and uncertainties as well as socially accepted norms of cooperation. However, even in more heterogeneous, differentiated rural communities where a certain number of producers may have an interest in free riding on customary institutions, if only a critical mass within a community coalesces around cooperative norms, communal property can come in to being (Moorhead and Lane, 1993).

Localisation of particular communities as seen in many developing countries linked through various networks facilitate informal transactions whose costs are low. Localisation improves the effectiveness of market transactions, including the costs of

Table I.
Two person prisoner's dilemma game

First person	Second person	
	Co-operate	Defect
Co-operate	(1, 1)	(−2, 2)
Defect	(2, −2)	(−1, −1)

Source: Runge (1981)

negotiations and monitoring contracts and the costs associated with opportunistic behaviour. When buyers and sellers are physically close together, negotiations and monitoring becomes less costly. This is true if information is transmitted through informal channels, word of mouth and personal contact. Communications costs increases with distance, localised industries also develop common experience and language that produce standard contracts whose negotiation costs are low. Localisation can also improve the effectiveness of market transactions by reducing the chances that a firm might engage in opportunistic behaviour. Reputation effects and the potential for sanctions through endogenous authority systems limit the degree of opportunistic behaviour. Also cultural similarities, community cohesiveness, interdependence among local firms, repeated interaction, and familiarity creates trust which can reduce opportunistic behaviour.

3.3 Property rights

Demsetz (1967) and Coase (1960) highlighted the importance of property rights. Their main proposition is that, in the absence of transactions costs, efficient resource allocation will occur with private property rights. It implies that private property is the most efficient system when land resources are scarce. Property rights develop to internalise externalities when the gains from internalisation are larger than the costs of internalisation (Demsetz, 1967). Market penetration and the commercialisation of agricultural activities can occur under private property. Property rights lower consultations and cooperation and hence the transactions costs. Exclusive rights to the resource base provides sufficient incentives to encourage development and cultivation (North and Thomas, 1977).

Neoclassical economics considers private property rights as the most efficient system of resource allocation (Coase, 1960). Only private property rights will further the markets and economic efficiency. Private property rights theorists argue that in using common property, externalities are created which are not internalised, free riding and the degradation of the natural resource occurs. Coase (1960) theorem says that government involvement is not necessary if property rights are well established. He showed that the outcomes will be efficient regardless of who owns the property rights. The property rights approach is problematic because it assumes that the main driving force behind institutional change is in the search for efficient use of property rights. Empirically to base a theory only on the survival of certain institutional forms and consider them to be the most efficient is incorrect. Further, the theory disregards other possible evolutionary paths. Some scholars stress than in line with the theory of induced institutional innovation, collective regulation of a resource may evolve under population growth when privatization is too costly (Hayami and Ruttan, 1985).

4. NIE and development

4.1 Government policy and management of natural resources

According to NIE, resource management rules and norms embedded in participatory processes within rural communities are central to equitable and sustainable solutions to local management and development problems. NIE also accepts the role of the informal sector, which confronts different sets of transformation and transactions costs than do members of the formal sector and these differences are regarded as crucial to the development process. Hence traditional rules are being accepted in preference to

expensive and difficult to coordinate private property rights. Institutions create shared understanding among the individuals of a group, which facilitates collective action beyond kin. Collective action is enhanced by trust and reciprocity. In the aggregate, increased returns are achieved via increased levels of generalized social trust and by institutionalising mechanisms of trust, reputation and reciprocity often referred to as social capital (Putnam, 1993; Fukuyama, 1995; North, 1990). Failure to appreciate the role of institutions by government policy makers has led to the loss of local institutions such as common property with serious consequences for development. The recent emphasis on market liberalisation of agricultural policy and intrusion of modern business interests into traditional resources territories.

The NIE framework has been used by many researchers in understanding various aspects of developing country agriculture (Binswanger and Rosensweig, 1986; Hoff and Stiglitz, 1990; Hayami and Ruttan, 1985). Government intervention in Sahelian forests hindered resource management efforts at the local level. In Brazilian forests even dispossession has occurred through such ill-conceived policies (Binswanger, 1991). In India the decline in the availability of common property resources has been caused by commercialisation of common property regimes, changing land tenure and regulation and other government policies. The case of Western Rajasthan in India dramatically illustrates the adverse consequences of privatisation and agricultural expansion. Land reform through privatisation and nationalisation were more concerned with establishing private property rights instead of creating an enabling environment for the evolution of new common property institutions (Shanmugaratnam, 1996). The traditional institutions of common property management have broken down. Government intervention resulted in the marginalisation of pastoral activities and serious resource degradation in both private property as well as common pool resources.

Government intervention in the management of the Guzara forest in Pakistan led to the tragedy of the commons, rent seeking behaviour and the depletion of the resource and predatory distribution of income (Azhar, 1993). Imperfect enforcement of regulations or corruption, has led to forest resources often becoming open access resources (Baland and Platteau 1998). White and Runge (1994) examined property rights in Haiti, where, watershed management was driven through legislation in particular, taxes, prohibitions, penalties and police action. Efforts to implement reforestation, soil conservation and watershed management have produced unsuccessful results. Monetary and commodity incentives were given to attract farmer participation. They ignored traditional knowledge and were indifferent to socio-cultural institutions and land tenure conditions. The "tragedy of the commons" had a firm foothold among Haiti's policy makers who assumed that no cooperative systems would work. Jodha (1990) found that in 82 villages in India he studied, only 10 percent of the villages had any regulated grazing provided by watchmen compared to the 1950s. None of these levied grazing taxes nor had any sanctions imposed upon those who violated local regulations. Only 16 percent obliged to maintain and repair common resources.

There are documented cases where collective choice arrangements in large irrigation schemes in Sri Lanka outperforms agency based management. The Gal Oya project, one of the earliest irrigation settlement schemes in Sri Lanka, is an outstanding irrigation scheme in Sri Lanka; the institutional organisers introduced local farmer

organisations in 1980 with considerable success. There was significant improvement in the efficiency of rice production after this arrangement. Despite pessimism by technical personnel, millions of dollars worth of rice was produced during the dry season when water is considered inadequate to grow rice (Uphoff and Wijayaratna, 2000). The village irrigation schemes often referred to as minor tanks in Sri Lanka have a long tradition of user management (Herath *et al.*, 1989). The small schemes had in-built local decision making systems including rotational irrigation which worked well.

In India, private ownership or operation of surface and ground water use for irrigation has generally replaced collective action. The result is substantial degradation of natural resources. Bardhan (2000) examined in detail cooperation in irrigation management in Tamil Nadu (South India) by empirically examining data from 48 irrigation communities in over six districts. In the canal systems, which were under some form of bureaucratic management, there has been increased violation of water sharing rules and hence found to be not conducive to cooperation. Bardhan (2000) also found that the water user associations in canal irrigation set-up by the bureaucracy ended up as fundraisers rather than efficient distributors of irrigation water.

Wade (1987) found that in South India, special institutional arrangements, which include traditional customs and norms and other social conventions, could induce cooperative behaviour in irrigation water management and minimise problems related to collective action. In post war Japan, planning and management of irrigation works have been again the responsibility of the farmer associations in the respective areas more than say, the case in India (Vaidyanathan, 1999). In China and Japan, river diversions and ponds serve most schemes. Collective management appears to work well here. Irrigators themselves adopting watershed-based management managed irrigation predominantly.

4.2 Factor markets

Transactions costs and incomplete information can be used to explain the emergence of widely prevalent agrarian institutions in developing countries such as share cropping, interlinked credit markets and insurance markets. According to Bardhan (1984), under a set of informational constraints and missing markets, a given agrarian institution may be serving a real economic function. Governments in developing countries can change the nature of transactions costs thereby increasing the potential of existing institutions. Abolishing such institutions may not improve the conditions of the beneficiaries.

In rural credit markets, transactions costs occur both on the lender's side and as well as the borrower's side. On the lender's side, transactions costs involve cost of information gathering, loan administration and enforcement. These costs are high for smaller borrowers than for larger borrowers. Saito and Villanueva (1981) estimated that in the Philippines lender's transactions costs of loans to small firms justify lending rates 5-7 percent higher than for large borrowers. Transactions cost are also incurred by borrowers. These involve application fees, and time spent in obtaining the loan etc. High transactions costs of borrowing from formal sources discourage small farmers, artisans, and craftsmen from availing themselves of formal credit. In Bangladesh, the transactions costs of informal loans as a percent of the loan are less than three percent but this is higher in formal loans (Herath, 1994).

There is also information asymmetry between the borrowers and lenders where the borrower possess more information than the lender. A borrower may plan to default a loan but the lender may not know this. The government may not be in a better position in obtaining information on the varying probabilities of default. Informal lenders do not have such informational constraints. Past policies de-emphasised informational advantages of informal credit markets. Several interesting innovations have been found in rural credit markets in developing countries such as group lending, interlinked credit and formal-informal integration which are briefly discussed in the next section.

4.2.1 Group lending. Lending to the world's poor through groups rather than individuals has become an increasingly popular poverty alleviation tool. Uncollateralized lending to jointly liable groups of individuals has proven to be a successful way of delivering credit to the poor in less developed countries (Prescott, 1997; Bhatt and Tang, 1998). To be financially viable, groups based micro lending need to economize on transaction costs for both lenders and borrowers. Group based lending not only helps the poor in generating income and employment, it is also a potent source of grassroots participation and empowerment in disadvantaged communities plagued by landlessness, disease, illiteracy and hunger.

The Grameen Bank in Bangladesh is an example of a group scheme. Its target group came from poorer families. The group guarantee minimises the severity of the collateral problem and the bank workers who deal closely with the target group help in information gathering thereby reducing moral hazard and risk. The group structure overcame the informational problem that enhanced the repayment rate. The transactions costs that borrowers incur are also kept low. In fact, low transaction costs is the main strength of the Grameen Bank. Several models have been developed to test group lending in various countries. Group loan repayment behaviour has been modelled in Burkino Faso. Besley and Coate (1995) show how the default of one group member can lead to a secondary default of a member who otherwise would have repaid an individuals loan. However, exploring these dynamics is beyond the scope of this paper.

4.2.2 Interlinking. Credit markets are interlinked with other markets such as those for land and labour (Basu, 1983). Such interlinked credit is a characteristics feature of informal lending and forms up to 40 percent of credit given out in some countries. Interlinking reduces transactions costs, provide information thereby reducing uncertainty and also reduce moral hazards and provide enforcement mechanisms. This can reduce the default rate and improve return on lending (Braverman and Guasch, 1986). The interlinking credit systems have highly localized geographical operations. Formal banks cannot operate in a highly localized fragmented system, which will increase its operation costs. Thus a trade-off between the degree of decentralized interlinking and reduction of transactions costs becomes an important decision parameter in introducing such credit systems by formal lenders.

4.2.3 Formal-informal integration. The necessity to obtain credit as well as an assured market by the farmers and the necessity to ensure a regular supply of products for expansion of trade by the trader results in a mutually reinforcing relationship between producers and traders. It is observed that trade credit forms a substantial part of informal credit given to borrowers in the rural Asia. It was found that in the Philippines, the new group of private lenders mainly prosperous farmers, who adopted

the new rice technology entered into lending activities. Their lending activities are limited to a small clientele and were but one of several investment activities they engaged in. Though some loan delinquencies were reported, these were much below those of the subsidized credit programmes (Floro, 1987).

The local input dealers in many countries provide some credit to the farmers in the form of inputs. Local inputs dealers can also be used as a conduit to channel government credit, especially in kind. The dealer can be given credit by the bank to be loaned to the farmers. This will enable a large number of clients to be reached. The specific form of the arrangement depends on the commodity as well as the other local features. The PPI special credit scheme of the Philippines has distributed credit in this form and found the average interest rate to be 15.5 percent with transactions costs of 5.38 percent giving a profit of 9.98 percent (Floro, 1987). The provision of credit to tea factories to be loaned to green tea producers in Sri Lanka is another example. The tea factory serves as the conduit for lending. The tea factory provides fertiliser to farmers who in turn provide green tea leaf to the factory. The government provides loans to the factory to be given out to farmers. The closer link between the tea factory and the farmers enhance the credit delivery system. The transactions costs, information costs, and risks are very low owing to the close association between the tea factory and the green tea producers (Herath, 1994).

5. Limitations of NIE

NIE assumes that the main force behind the evolution of institutions is the search for efficiency for the use of resources (Baland and Plattaeu, 1998). This implies a narrow range of outcomes but does not account for a range of suboptimal evolutionary patterns in rural societies. In particular NIE ignores the role of the state, the influence of social and cultural norms and distributive consequences. It was pointed out earlier in this paper that the involvement of the government institutional development can go in varied directions depending upon the host of factors. Hayami and Kikuchi (1981) have outlined the evolutionary sequences for institutions but practical observations indicate that this sequence can be disturbed. It is not the only path in institutional development.

NIE has not clearly delineated a role for the government. For the NIE to succeed, government is an essential element, but it has different role to play than the traditional government role. Governments must provide supporting indigenous management institutions, notably through the provision of conflict resolution assistance enhancing the claims of poor people in relation to the institutions including addressing the power relations by which certain elite groups are able to dominate legal and institutional frameworks. There is evidence to support that unless management regimes are specifically designed to include poor people and particularly poor women, then community-based management may be externally controlled by elites. Poor people need to be reconceptualized positively as contributors to the sustainable management and regeneration rather than degradation of the resources. Governments should ensure that vulnerable groups are protected and fully incorporated into the decision making process and the distribution of benefits. This important gap needs to be addressed in future research. Future research needs to be located within a wider analysis of political economy and other causes for inefficiencies such as wide scale logging and mining that weaken or remove poor people's customary rights.

Another problem in NIE is that it does not stress the role of social norms. The complex social relationships, which include social norms, cultural values and institutions are collectively referred to as social capital (Rudd, 2000; Wolcock, 1998). North (1990) considers social capital to be institutions that lower transactions costs and perform better than markets (North, 1990). Putnam (1993) defines social capital as those features of social life that enable participants to act together more effectively to pursue shared objectives. Social capital involves trust, reciprocity, common rules, norms, and sanctions and connectedness in institutions. The evolutionary trajectories of institutions can be influenced by initial conditions of prevailing norms and values or social capital. When social capital is high, society can dispense with collective regulation. Also the specific history can influence the evolution of institutions. Past experience can be a positive factor in successful collective action (Baland and Platteau, 1998).

Income distribution in conventional terms refers to the functional distribution of income i.e. its distribution among the factors of production. In NIE, it refers to the personal distribution of income i.e. distribution of income among family units or households in a nation. New institutions can change the existing pattern of income distribution. Institutionalists agree that income inequality is detrimental to growth. They consider equity and growth to be complements and not substitutes. The institutionalists have no ideal distribution of income and it should be appraised and reappraised through continuous self-corrective life processes which include government action. Thus privatisation may affect the income distribution and the affected parties may oppose moves for privatisation. When common property is used primarily by the poor, privatisation may affect those who are more vulnerable in society and hence they may oppose such change. Evolution of private property rights may threaten existing social balance (Baland and Platteau, 1998). There is evidence to show that distributive consequences may lead to institutional innovation within communal ownership regime such as rotating access to scarce resource sites. The Thattumaru/Kattimaru systems of land tenure in paddy land in Sri Lanka is a good example. Also rotating irrigation is another evolution of common property systems in many Asian countries.

Uncertainty is another important factor in collective action in irrigation, formal and informal credit markets, and use of community forest resources, etc. One source of uncertainty is the lack of trust among the participants. Absence of trust among the market participants makes it difficult to sustain cooperative behaviour. Another source of uncertainty stems from the external environment. In irrigation for example, the behaviour of the bureaucracy and the behaviour of government officials is uncertain which creates obstacles for exchange and cooperation among farmers. However, the role of uncertainty in transactions cost theory has not been dealt with adequately. Coase (1960) and Williamson (1975, 1985) seem to gloss over uncertainty without offering a definition. According to Williamson, bounded rationality limits are forseeable such that efficient governance can always be implemented. Thus an equilibrium assignment of transactions across markets and firms can be assured at the outset removing any role for time and process in Williamson's analysis. If time is brought into the analysis, there will be nothing to prevent agents from acquiring full knowledge, removing all limits on market contracting. Genuine uncertainty occurs in and through real time and requires constant and ongoing agency adaptation.

By adopting a closed systems approach, transactions cost economics sidesteps radical uncertainty and opts instead for a form of conservative certitude wherein there exists no possibility for fundamental change under existing institutions (Dequech, 2001).

6. Concluding observations

This paper critically reviews the various institutional environments that developing countries face in addressing development issues. It shows that under conditions found in most developing countries, a diversity of institutions is available that can provide services more satisfactorily than either the market or the government. Institutions such as user groups, cooperatives, formal-informal links, interlinked markets, etc. can be more effective in contributing to development. For larger projects, the centralized government may have some advantages but most analysis supporting government provision do not consider the full array of transactions costs. NIE has broadened the scope of the reforms in development approaches that hopefully can yield a greater measure of success.

It is now well accepted that government interventions to minimise inefficiencies have destabilised the capacity of rural communities to self-governance or collective action. Government involvement has also reduced the development of social capital. It has led to imperfect enforcement and corruption and exacerbates the distribution of benefits. The NIE suggests that due consideration be given to traditional and indigenous organisations, and local systems of management. The new approach should be based upon participatory decision making. The role of the government is to facilitate effective functioning of these institutions. Governments can influence the outcome of institutional change through appropriate forms of intervention such as legal support provided to various formal and informal groups.

It is therefore clear that new thinking and practices are needed, particularly to develop institutions that are structurally suited for management and protection at the local level. This usually means more than just revising old institutions and traditions. It means new forms of organisation, associations and platforms for common action in rural communities, and more appropriate forms of government intervention such as legal recognition, and provision of property rights for local institutions and assistance in the development of social capital.

The advocacy is for a changed emphasis towards locally oriented management of resources and a move away from states and markets. Greater autonomy to local groups means that external actors would have to relinquish control over the rules and the outcomes of community based conservation. The process restores the legitimacy and relevance of rural institutions and mitigate the ubiquity of the political process. Regarding the future of NIE, I refer to Williamson's recent assertion that "NIE is a boiling cauldron. Competing ideas are being pursued within North's line of reasoning and also the transactions cost approaches. Evolutionary economics and path dependence are areas that are progressing. NIE is unfinished business, it is the little engine and its best days lie ahead".

Note

1. Simon's theory assumes that an optimal solution exists ex ante although actors cannot identify it. However, this contradicts with fundamental uncertainty because new states can occur in the future through the peoples actions (Dequech, 2001)

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