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Changements agraires dans la plaine du Népal : le rôle des acteurs locaux et de l'État

Olivia Aubriot and Tristan Bruslé

Introduction

- The Nepalese lowlands have become a rice-growing region the dream of Shah rulers in the eighteenth century (Ramirez 2009) thanks to public policies and investments as well as to the involvement of local actors in transforming this space; even if not all actors have played the same role. Drastic changes have occured: sparsely inhabited in the 1950s, the Tarai plain has become a fully occupied space which, in 2021, houses 53% of the country's population.¹ However, despite significant investments, agrarian policies have not had the expected effects (Basnyat 1995). Yields remain low and the increase in agricultural production is well below population growth (Pyakuryal et al 2016). Some researchers explain these results by a lack of technical means, a fragmentation of the land and the small size of plots (Sharma et al 2021); others assert that the semi-feudal structure of Tarai society, fraught with significant inequalities between landlords, small farmers and landless, limits the diffusion of innovations (Sugden 2013).
- While recognising these structural constraints, we propose to focus on the relations between the Nepalese state and non-state actors to analyse the agrarian changes that have occurred in the plain. In doing so, we adopt the 'decentring' proposed by Mosse (2003), who showed that the absence of collective maintenance of ponds in South India is not due to a lack of social cohesion but to an evolution of the state-community relationship. The aim of this article is to identify, on the one hand, the way in which the Nepalese state positions itself vis-à-vis the local population through development policies and, on the other hand, the role and agency of the different actors involved. Here we consider the state in a broad sense not only with regards its centralised

institutions but also international aid agreements (via cooperation, international non-governmental organisations – INGOs). By local actors, we mean the inhabitants of the Tarai, whether farmers – landowners, small farmers or tenants on cultivated land – or landless labourers, absentee landlords, various intermediaries and local non-governmental organisations. We seek to explain why certain groups of actors have benefited from these policies while others have been excluded. We will attempt to identify the processes driven by policies and those driven by farmers in the development of the Tarai plain.

- To this end, we conducted a literature review related to the social organisation and agrarian changes in the Tarai and to the impact of agrarian, land and irrigation policies on these changes. We have included the results of a collaborative research project to which we contributed, from 2013 to 2017, about land and water management in Sunsari, Saptari and Rupandehi.²
- The plain-mountain dichotomy is a common way of highlighting the contrasting dynamics of Nepalese space, notably regarding the type of irrigation, land reforms etc.³ However, as surprising as it may seem, it was quite difficult to find data specific to the plain as a whole, especially with regard to agricultural production or development projects. Nor could we find any recent figures from 2011 onwards about agriculture at individual farm level. As for studies on rural Tarai society, they are either very localised (Müller-Böker 1999, Sugden et al 2013) or they focus primarily on Tharus⁴ (Krauskopff 2000, Skar 1999), even though they represented only 12.5% of the Tarai population in 2011.
- This article provides an overview of agrarian dynamics in the Tarai in relation to national policies and tothe links between the state and local actors, while acknowledging that the Tarai is not homogeneous in terms of its history, density of settlement or public investment. We take as a framework the analysis of the agrarian political economy to explore our subject from a historical perspective. The first part of the article explains the choice of the four historical phases, starting from the eighteenth century when land policies structured local society on the basis of strong inequalities in access to land. The following sections each focus on one of the four historical periods and on their characteristics in terms of the relationship between the state and local actors. We show that since the eighteenth century the state has chosen to favour particular rural interlocutors in its interactions in accordance with the specific characteristics of each period's political and economic orientation.

Four phases of agrarian changes and their policy paradigm

In his article on the agrarian political economy, Bernstein (2015) distinguishes on a global scale three main phases in development policies and associated processes of agrarian change: (i) the pre-1950s period (including colonial experiences); (ii) the 1950s-70s characterised by discourses of 'national development' based on modernisation and more productive agriculture; (iii) the post-1970s when development was achieved within a globalised context. Nepal is no exception to this pattern, although the transition between the second and third phases can be situated in the 1980s. Indeed, Sugden et al (2017), who trace back over Nepal's agrarian transformations, define and characterise the second and third phases as: (ii) the 1950s-

80s with the introduction of systematic economic planning with a focus on infrastructural expansion and foreign government influence; (iii) the 1990s to the present day characterised by monetisation, migration and articulation between production at local level and capitalism on a larger scale. However, for the Tarai, we have split this last phase into two because certain societal changes in the 2000s (mainly the People's War, long-distance labour migration, urbanisation) acted as a catalyst for market-oriented agriculture and the individualisation of access to water and to public aid in the Tarai. The four main phases related to Tarai development policies are therefore: before 1950, from 1950 to the 1980s, from the mid-1980s to the 2000s and since the 2000s.

Nepal's various reforms and paradigm shifts with regard to land tenure, water management and agricultural governance have not occurred simultaneously, as shown in figure 1 (further discussed below). Moreover, issues relating to these domains do not all come under the same management mechanisms. Both individual and collective spheres are concerned because agriculture is an individual enterprise, water a common resource, and land private or public property. We therefore need to analyse situations that are characterised by the complex overlapping between domains (agriculture, land, water, politics), between private and public spheres, and between temporalities (current and past). We also highlight the relations between the state and local actors for each phase: we note that some domains weigh more heavily in the definition of these relations.

1950 1960 1980 2000 2010 1970 1990 2020 Elements Multi-party system Panchayat system of the Characteristic of E S Waves of migration to the Tara (XXX) the state-farm relationship social and political Increase in labour outmigration context Malaria eradication Change of X development Cooperative act paradigm 7 TOWARDS MARKET 2 6 1. Opening of the country Agriculture to foreigners 2. Five-year development Intensification of agriculture 3. Development of irrigation Land reform infrastructure 4. Suppression of land LAND TENURE Land POLICIES: KATHMANDU ELITE 5. Participatory 6. Structural adjustment decentralisation 7. More cash crop private sector PARTICIPATORY MANAGEMENT INFRASTRUCTURE 5 LOCAL ELITE CAPTURE AND Water DEVELOPMENT **EMPOWERMENT OF** DISTRIBUTIONAL COALITION Law and reform 1950 1960 1970 1990 2000 2010 2020

Fig 1. Change in the various paradigms linked to agriculture, to land and to water and introduction of new phases, putting the emphasis on the type of relationship between the state and farmers

Source: O Aubriot; design: A Guillaume.

The Tarai before 1950: land policies structure the relations between the state and society

- Until the unification of Nepal (late eighteenth century) Himalayan principalities and north Indian kingdoms laid claim to the Tarai (Warner 2014). The latter was sparsely populated, already a place given over to agricultural production and seasonal pasturage (Gaige 1975). The unification of the country marked an important step in the relationship between the state and Tarai peasants. We have identified four types of interactions related to land policy which influenced the way the Tarai evolved.
- 9 Firstly, the Nepalese state extracted money from farmers through various means of revenue collection in order to fund its administration and army, unification campaigns and the war against the British (1814–16) (Meyer 2000, Regmi 1971). The Tarai was key to this process, with the main state revenue coming from taxes on elephants, herbs, timber and land (Adhikari et al 2011).
- Secondly, the state allocated land under privileged tenures (*jagir*, *birta*)⁵ to military servicemen and people close to power in Kathmandu. This created a category of non-resident landlords based outside the Tarai, instigating broad inequality in land access (Regmi 1976), the effects of which remain evident today despite the 1960s agrarian reforms (Sugden 2013).
- 11 Thirdly, the land tenure system structured relations between the emerging state and the population. The state was the landowner, and an owner-tenant relationship characterised the link between the state and farmers. Local actors were chosen as representatives of the state administration: they collected taxes and wielded judicial power, coordinated conflict resolution and supervised the assigning of corvée labour in their area of jurisdiction. Chaudharis (tax collectors in the Tarai) performed this function at parganna (group of villages) level but, from 1861 onwards, they lost their power because revenue offices were established at district level and jimidars (collectors throughout Nepal) were appointed at village level. Jimidars could claim forests or socalled wastelands for themselves, solicit settlers from India or divert cultivators from birta land to their own land (Regmi 1976). This jimidari system created 'a rural aristocracy capable of injecting capital investment and entrepreneurial ability into the field of agriculture' (ibid 108). It also prompted the exploitation of peasants through various systems such as forced and unpaid labour (begaari), the bonded labour system (kamaiya) (Chhetri 2005) and haruwa (Dhakal 2007). These systems benefited Tharu chiefs, local landlords (Krauskopff 1999), as well as the Kathmandu elite during hunting parties (especially in Chitwan, a royal reserve) (Müller-Böker 1999). In this intermediary role, jimidars acquired an economic and social status superior to that of the majority of farmers. In 1948, in the district of Morang, 'some jimidars each owned as much as 20,000 to 22,000 bighas [nearly 15,000 ha] and employed 450 to 500 plow hands and cowherds', while 23% of households had less than one bigha (Regmi 1976: 118).
- Finally, this land tenure system provided the state with a way of controlling its own produce and of anchoring the Tarai population, especially the Tharus, in the territory. Indeed, Tharus had previously been very mobile, not hesitating to flee as soon as they were dissatisfied with a village chief or wanted to avoid paying taxes or to escape the oppression of state agents (Krauskopff 1989, 2000, 2021). Inviting Indians to come to work the land in the plain from the end of the eighteenth century (Dahal 1983) an

incentive that proved a success, especially in eastern Nepal (Regmi 1976) – was a way of counteracting the mobility of the Tharus and their strategy of resistance against the state (Krauskopff 2021).

The rare writings by travellers about Tarai agriculture from the first half of the nineteenth century show a sparsely and heterogeneously cultivated region where large pastures used by Indian farmers and migrating mountain populations in winter coexist with clearings exploited by Tharus and intermittently cultivated fields (ibid). The main crops were transplanted rice, broadcast rice, maize, finger millet, buckwheat, mustard and a range of pulses. It is worth noting that there was no wheat, though it was grown over the border in India. Campbell gives approximate yield figures (1.1T/ha for transplanted rice, while broadcast rice was only 20% lower) which were overall higher than in the Kathmandu Valley (RRS, 1985a).

The early years of the Rana regime (1846–1950) proved to be decisive with regard to the use of the Tarai. With a keen interest in gaining political support, the Ranas helped the British Raj during the Indian mutiny (1857) by providing military personnel (Gaige 1975). Then, from 1860 onwards, a diplomatic relationship replaced the previously tense relations (ibid) and the plain, no longer needed as a barrier zone against its southern neighbours, could be cultivated more extensively. There began a period of forest exploitation and of grain exports from the Tarai subsequent to the expansion of the railway network in India and to the first towns established nearby in Nepal (Basyal et al 2001). Rana family members were the main beneficiaries of newly granted forests allocated to them in the form of birta and jagir land (Adhikari et al 2011). In the eastern Tarai, commercial crops such as jute, cotton and sugar cane were cultivated, and jute began to be exported from the second half of the nineteenth century (RRS 1984).

During the same period, vast irrigation networks managed by farmers (ie farmers and labourers supervised by Tharu leaders) were set up. Though government incentives to build canals were developed via tax exemption, no state funding was provided (Pradhan 1990). However, some similarities between irrigation patterns observed in different places lead us to suggest that organisational models were proposed by individuals close to central power and that large irrigation systems were simply not the farmers' response to current incentives. This is the case in Rupandehi where the Chattis Mauja ('36 villages') irrigation network that was built during the time of Prime Minister Jang Bahadur (1846–63) (Yoder 1994) and the Char Tapaha network (Regmi et al 2016), each on either side of the Tinau River, share common features, such as the size of the network (2,000 to 3,000ha), a system for sharing water and maintenance rules.

All the changes that occurred in the 1860s show that, even if the state was aware of the value of the region, it made hardly any direct investment. Changes were implemented by the plain's inhabitants and newcomers. Hill people were reluctant to migrate to the Tarai, perhaps because of malaria and also because they wanted to 'escape the oppression within the country' by migrating to India, not within Nepal (Ojha 1983: 27). In Sunsari, Tharus and groups that today constitute the Madheshis started to arrive in the 1860s from Saptari and from India to work the land and settle there (Candau et al 2015).

17 In 1920, the Nepalese state developed the first irrigation infrastructure - the Chandra Canal in the east of Saptari district (Khanal 2003) - and created the Department of Agriculture (FAO 2010). At that time, settlement plans were drawn up for the Rapti Valley and the area towards Morang to attract Nepalese hill people rather than Indians, but this did not have the desired effect (Ojha 1983). Later, in order to increase agricultural production and taxes during the reign of Prime Minister Juddha Shumshere (1932–45), the Department of Agriculture was reorganised into a board with some regional branches in the Tarai 'to make arrangements for irrigation facilities, improved seeds etc for the development of agriculture' (RRS 1985b: 118). At the same time, two other irrigation networks were built in the western and central Tarai (Khanal 2003). Indian businessmen were encouraged to invest in agriculture-based industrialisation because Nepal did not have the means to do so. Thus, in the 1930s–40s, Bhadrapur, Janakpur, Birganj and Biratnagar were connected to Indian railheads and developed as market towns, setting up industries such as rice production, sugar cane farms, cotton mills and cigarette factories (Dahal 1983). By the 1930s, the Tarai around Biratnagar had become a major jute-growing area thanks to the jute mill in Katihar, Bihar and then to the one built in 1936 in Nepal by the same leading Indian industrialist (Gaige 1975).8

18 This first phase in the transformation of the Tarai by the emerging Nepalese state was based on land policies that allowed the Ranas to extract goods and money from their subjects, to control relationships between peasants and their environment - with the existence, at state level, of a kind of ecological conscience (Ramirez 2009) -, and to structure society according to a very firmly established hierarchy and strong socioeconomic inequalities. But there was no vision of development that could benefit everybody. The peasantry was burdened with land taxes and lived in thatched huts, while rulers resided in stucco palaces – to paraphrase the title of Regmi's book (1978b). Local chiefs acted as intermediaries between farmers and the state, thereby perpetuating their local elite status. Part of the Kathmandu elite also fulfilled this intermediary function. From the 1920s to the 1940s, the state itself did not invest in collective infrastructures except in a few cases, such as the Chandra canal. Thus, agricultural development was left to farmers, mainly Tarai natives and seasonal migrants from India. The state did not interfere in the management of resources, although we assume that advisory support was provided for the organisation of large irrigation systems. The farmers, exploited, indebted and forced to work at the mercy of local functionaries, had little incentive to improve the agricultural system.

From 1950 to the 1980s: public policies, collective infrastructures and empowerment of engineers

Over the decades following the fall of the autocratic Rana regime in 1950-1951, Nepal's political leaders focused on the country's economic development, especially regarding agriculture, with the aim of feeding a 95% rural population that was starving and lived in miserable conditions (Dahal 1997). To this end, Nepal turned to international aid and, from 1957, implemented five-year development plans. Administrative entities were created to oversee the various agricultural development programmes: the Department of Irrigation (1952) and the Department of Agriculture (1952). The Department of Forests had been in place since 1947 with the help of a British advisor (Ranjit 2019). In order to reduce cereal imports, agricultural development in the Tarai was promoted, in particular by encouraging mountain populations to settle rather than by asking Indian populations to valorise the plain (Adhikari et al 2011, Gaige 1975). Furthermore, reforms and programmes were implemented in the plain: land

redistribution, settlement programmes, malaria control, construction of roads, dams and irrigation networks. The Tarai underwent a rapid transformation.

Land policies played an important role in this developmentalist scheme. The very unequal land distribution resulting from the Rana period needed to be addressed. Thus, the emblems of Rana authority – *jagir*, *birta*, *jimidari* and *kipat*⁹ – were abolished between 1952 and 1966, leaving only *raikar* and *guthi* tenures (Ojha 1983, Regmi 1978a). ¹⁰ The state appropriated forests to convert them into agricultural land and settlements for hill people (Adhikari et al 2011). ¹¹ As a result, forests were no longer accessible as potential farmland for Tharus and, in 1951, their practice of shifting cultivation was banned (Müller-Böker 1999). The 1964 Lands Act aimed at a better distribution of land but 'was not able to take over the excess land (above the ceiling)' ¹² (Adhikari 2019: 518) to limit the number of landless people and to achieve land redistribution (Sharma et al 2014). In the 1980s, 9% of Nepalese households still controlled 50% of the land (Shrestha 1989). The lack of support for these reforms by land-based political elites explains the failure to provide more equitable access to land (Sharma et al 2014).

The Nepalese government promoted the migration of hill people to the Tarai plain in order both to relieve demographic pressure on already saturated mountain areas (Shrestha 1989) and to compensate for the closure of the borders with Burma and Bhutan, countries to which many Nepalese workers had gone since the British introduced capitalism in India via plantations (Sagant 1978). Moreover, resettlement programmes, such as the Rapti Valley one funded by the United States in 1955, also served to guard against communist rebellions (Adhikari 2008, Robertson 2018). Thus, these strategies to develop the Tarai met the objectives not only of domestic policies but also of international ones.

During the second half of the twentieth century, migrations from the hills to the Tarai constituted a major phenomenon in the plain dynamics. Other than the ten resettlement programmes that distributed 15,000ha to 8,000 families during the period 1964-80 - very few families compared with the initial objective of resettling 43,000 families on 100,000ha (Ojha 1983) - countless spontaneous migrations took place. 13 Of note, as seen in figure 2, is the population growth rate from 1961 to 1981 which was much higher in the plain than in Nepal as a whole. This is mainly due to these internal migrations, even if migrations from India continued to take place. The Tarai gradually filled up: home to 2.5 million people (a third of Nepal's population) in 1961, it housed 6.5 million (43.6% of Nepal's population) in 1981. Hill migrants either settled on private land they bought or encroached on state-owned land. Our field data from northern Sunsari and Rupandehi shows an increase in land transactions from the introduction of the 1964 Lands Act onwards. It also confirms the statement made by Gaige (1975) and Adhikari et al (2011) about the dispossession of land at the expense of Tharus, the main victims of hill-population migration. The expansion of agricultural land took place at the expense of forests and pastures, leading to the gradual disappearance of the Tharus' large herds, as observed in Dang (Krauskopff 1989) and Chitwan (Müller-Böker 1999), as well as of the Madheshis' herds (our data in Sunsari). Moreover, the creation of national parks (since the 1970s) led to a ban on using forests, thus limiting livestock farming and agriculture (Müller-Böker 1999).14 As for encroachment, this took place especially during periods of political unrest, such as in 1979 before the referendum on the system of government, leading to forest resource depletion (Adhikari et al 2011).

The *jamindari* system was abolished by the 1964 Lands Act and replaced by tax management administration. Yet the bonded labour system was not revoked. Thus, rural aristocracy, which had been put in place during the previous phase, prevailed. Former tax collectors and absentee landlords who came to settle in the Tarai became village headmen.

Change in 10 years Population in millions 30 60% 25 50% 20 40% 54% 10 20% 1952 1961 1971 1981 1991 2001 2011 2021 Tarai population (and % of total pop) Nepal population ■10-year change in Tarai (in %) ---- 10-year change in Nepal (in %)

Fig 2. Demography of Nepal and the Tarai since the mid-twentieth century

Sources: Government of Nepal censuses

- Any development programmes requiring specific technological knowledge were developed according to a top-down approach emblematic of this period. This placed a lot of power in the hands of engineers and created a situation where the local people remained voiceless and their knowledge ignored. For example, malaria control was carried out using DDT. This is now being challenged because the engineering solutions ignored local practices and knowledge (Robertson 2018). Similarly, until 1980, traditional irrigation systems were overlooked in official irrigation statistics (Pradhan 2010). In fact, they were destroyed when new systems had to be built and international experts were called in. The population was not even consulted, as was the case in Chitwan (Liebrand 2017). The development of irrigation systems was nevertheless limited due to political choices and to India-Nepal relations. The Koshi treaty (1954) did not initially provide water for irrigation in Nepal; however, under pressure from Nepalese people, the government had to negotiate with India in 1964. Although the Gandak treaty (1959) thereafter included irrigation, due to various negotiations no new infrastructures were implemented during the period 1966-90, (Dhungel 2009). In the 1960s, the Green Revolution and its innovation package - irrigation, hybrid varieties, chemical fertilizers - gained ground in India but did not get as far as in the Tarai or Nepal (Basnyat 1995). It was only in state-controlled settlements in the Tarai and in the 1960s that 'hill resettlers...received government credits...to improve land quality and productivity' (Shrestha et al 1993: 811). Five research centres specialised in rice, wheat and maize improvement were, however, created in the plain.
- By the end of the 1950–80 phase, cultivation of the Tarai had led to an increase in farm production. Some modernisation of agriculture had taken place but decisions were

imposed on the population by engineers, for whom this phase marks a state of hegemony. State investments were mainly earmarked for collective infrastructures (canal rehabilitation, roads, schools etc) or aid programmes seeking to benefit the majority of farmers (through research stations, selection of improved varieties, fertiliser subsidies etc). In the following phase, the situation would be different.

From the mid-1980s to the years 2000s: participatory management and appropriation of resources by local elites

26 In the 1980s, a new development paradigm emerged, emphasising 'participation, decentralization of decision making, and targeting of the poor with specific policies... and structural reforms...to reduce state intrusions' (Agrawal et al 1999: 3). Participatory resource management policies have been implemented in all the countries of the Global South (Cleaver 2002). In Nepal, the idea of structural adjustments emerged as the influence of donors on development policies increased (Sharma 2016). The main objectives were to reduce public expenditure and to orient the Nepalese economy towards the global market (Shakya 2018). In the literature, a finger was systematically pointed at the economic and organisational failure of large-scale state irrigation projects.¹⁵ Nepal then fully endorsed the concept of participatory management,¹⁶ which had already developed in the late 1970s when the decentralisation of forest control had been initiated (Agrawal et al 1999). It was only in the mid-1980s that the decentralisation of natural resource management became popular (Agrawal et al 2005). A few programmes laid the emphasis on users' involvement, such as the 'Irrigation line of credit' launched in 1988 (Shukla 2002). At that time, forest user groups and irrigation user groups were registered under statutes 'enacted during the Panchayat period which didn't allow the groups to take initiative and collective work' (Pradhan 2010: 30).

27 Participatory management, through the creation of formal user groups, was considered a way of empowering local actors who were at the forefront of development policies. The distribution of international aid to the country, then to the regions and villages, was conditioned by the creation of such groups. Thus, user groups were formed, each with a specific area of expertise: water user associations (WUA) for irrigation, forest user groups for forest management, farmer groups to access government services in agriculture and so on. The paradigm shift forced administrations as well as engineers to change their perspective; in state-run irrigation systems, a management transfer from Department of Irrigation (DoI) engineers to WUAs was implemented. In the Tarai, this took two forms: a full handover to WUAs in systems of less than 2,000ha and joint management by WUAs and the DoI in larger systems (Mishra et al 1996). Due to the need to understand local actors' involvement in traditional irrigation systems, from the mid-1980s these systems became the focus of the International Water Management Institute, the main research centre specialised in irrigation and water which coordinated numerous studies, conferences and publications (IWMI 2011). Donors offered greater financial support to rehabilitate these farmer-managed systems through the creation of formal WUAs (Shukla 2002). Irrigators were required to participate in the rehabilitation, both financially and in terms of labour (ibid), while the DoI coordinated the creation of WUAs but retained control over technical aspects (Pradhan 2010). In the Tarai, some of these traditional irrigation systems were extended or combined, as in Chitwan (Liebrand 2017), while others were destroyed and replaced by large new irrigation networks, like those in West Gandak (Khanal 2003) and in Sunsari and Morang (Candau et al 2015).

Since the mid-1990s, the discourse of international donors has focused on the promotion of 'good governance' that is based on three complementary principles: privatisation, decentralisation and participation which rely on three actors: the state, the private sector and civil society (Quentin 2012). These transformations towards the participation of a greater number of people and the restoration of democracy in 1990 brought about crucial changes in Nepal, including an acceleration of the pace of reforms. This was accompanied by a profound change of paradigm imposed by donors, which the state subsequently transposed into various laws for the management of common resources: Decentralisation Law (1992), Water Resource Act (1992), Irrigation Policy (1992 and revised in 1997) and Forest Act (1993). These reforms granted farmers more rights in managing natural resources.

However, the effectiveness of local (or non-elite) people's empowerment in the decision-making process through their participation is questionable. Regarding irrigation, the representativeness of members of water associations was biased because WUA presidents had initially been chosen from a designated list of local wealthy farmers that politicians had provided to engineers and pancayat offices (Valadaud this issue, Khanal 2003). Moreover, during the political chaos of the People's War (1996–2006), the WUAs of large irrigation systems did not receive any support from the DoI in learning management tasks because government engineers, frightened of Maoist rebels, avoided going to the field (Valadaud 2021). The management of infrastructures remained de facto in the hands of those already in authority.

Rehabilitation projects took place in traditional or farmer-managed irrigation systems (FMIS) only if requested by farmers (Shukla 2002). This has obliged farmers to maintain contact with the administration to keep abreast of available aids and to have a better chance of benefiting from them. This was generally the responsibility of wealthy users (Khanal 2003, Agrawal et al 2005). The maintenance and improvement of irrigation networks also called for building contractors who, along with DoI engineers, estimate the scope and the amount of the required interventions (Pradhan 2010). This corresponds to the 'coalition distribution' described by Pfaff-Czarnecka (2008) in Bajhang (western mountains of Nepal). This coalition distribution refers to the interplay between politicians, bureaucrats and entrepreneurs who 'channel[led] money and services allotted to local communities into their own pockets' (ibid, 72). While appropriating for themselves the resource allotted to the community, 'they simultaneously shape and take advantage of local communities' popular mistrust and a sense of helplessness vis-à-vis "the state" (ibid). The operation of WUAs in large irrigation systems is based on this type of coalition distribution. Their elected members use both clientelism and the interplay they have developed with engineers and entrepreneurs to strengthen their position of power (Valadaud 2021). This coalition distribution reinforces socio-economic inequalities, especially those linked to land.

In the agricultural sector, the 1990s neo-liberal reforms resulted in the state's gradual financial disengagement and in the development of the private sector, once again granting a key role to some local actors. Thus, the Agriculture Perspective Plan (APP) (1995–2015) was in keeping with the neoliberal approach of its funders (Asian Development Bank, World Bank), encouraging small-farmer entrepreneurship in

commercial production (Sugden 2009). Indeed, the APP was intended, among other things, to promote the production of cash crops, thus transforming subsistence agriculture into commercial farming. However, as of 1973, the Nepal Planning Commission had promoted market gardening and cash crops as a solution for reducing rural poverty, but these agricultural policies were in fact implemented only in the late 1990s. Vegetable production doubled and cash crops multiplied by 1.5 within 12 years (Government of Nepal 2012) thanks to 'the expenditure in agriculture that started at a good level only after the APP implementation' (Shrestha 2008). The emphasis was therefore on individual initiatives and, to a lesser extent, on large-scale programmes. From the mid-1990s onwards, government spending and international aid for agriculture and irrigation steadily declined (Pyakuryal et al 2016). The gradual disinvolvement of the state was reflected in lower subsidies for fertilisers or tube wells, the private sector being allowed to import and market fertilizers (Khanal 2003). As India was still subsidising fertilizers, a black market rapidly emerged in the Tarai (ibid).

International NGOs (INGOs), present in the humanitarian sector since the 1970s, were eventually recognised as development partners in 1990; they became essential actors to whom the state entrusted many of its development schemes. Legal instruments were provided, such as the 1992 Social Welfare Act which prohibits INGOs from directly implementing projects and programmes and obliges them to work in partnership with local NGOs. As a result, the number of local NGOs multiplied by a hundred within 10 years (Tanaka 2011). Numerous actions involving women's groups were undertaken, notably through collective micro-credits for individual projects (purchase of a goat, fertiliser, a pump, financing school fees etc) to promote development at grass-roots level.

At the end of the 1990s, aid was directed towards specific activities, for example cash crops or activities involving specific actors such as private sector entrepreneurs or farmers who could invest. This merely amplified the structural inequalities linked to differentiated access to land in the Tarai, especially in the east where semi-feudal relations still existed between landowners and the landless (Hatlebakk 2007, Sugden 2013).

This penultimate period of our study covers the stage when the Nepalese state seemed to withdraw from its past prerogatives in sectors such as land, irrigation and agriculture, while keeping a hand in development initiatives and the budget. This is part of a global agenda sanctioning 'the decline of the state as the agent of development' (Agrawal et al 1999) through the devolution of competencies at local level. New categories of actors have emerged to the extent that the state appears to be an intermediary or a facilitator between global actors and local ones. The introduction of new resource management tools in the Tarai has, however, resulted in rising inequalities within society.

Since the 2000s: multiplication of types of actors linked to a market-oriented agriculture

The characteristics of the previous period (participatory management programmes, neoliberal measures) have still applied in this last period. Since the 2000s, some societal catalysts and changes (People's War, increase in long-distance labour migrations, urbanisation) have facilitated the implementation of recommendations related to

market-oriented agriculture as a solution to combat poverty, as formulated in the 1995 Agriculture Perspective Plan (Sharma 2016). The main reforms affecting relations between the state and local actors concern the abolition of the *kamaiya* system in 2000 thanks to freedom movements – a result of the People's War – and state restructuring in 2015 and 2017, which has had an ongoing impact on agriculture service delivery (Dahal et al 2020).¹⁷

36 The People's War (1996-2006) indirectly contributed to the process of producing market-oriented crops. An increasing number of young people migrated abroad for work to avoid being conscripted into the Maoist Army, turning to new destinations such as the Gulf countries and Malaysia. These migrations were actively encouraged by the state and gave rise to a 'remittance economy' (Seddon et al 2001). These remittances - which represent a third of the GDP and exceed the share of agricultural production - have resulted in a more market-oriented economy. This has led to the disappearance of bartering and of mutual aid because almost everything is now paid for in hard cash. The Tarai has been hugely affected by labour out-migration. From 2003 to 2009, among the top ten districts sending migrants, nine were in the Tarai (Gartaula et al 2013). In Sunsari for example, labour migrations began in the late 1990s and also included the Tharus who up until then had not even migrated to India for work (Gerboin 2014). One of the major consequences of these international migrations is the reduction in poverty which decreased further thanks to migrants' individual initiatives rather than to the improvement of agriculture driven by government policies, the core objective of the five-year plans and the APP.

The rapid urbanisation of Nepal – the highest rate in South Asia (Muzzini et al 2013) which occurred mainly in the Tarai and the Kathmandu Valley – highlights yet another social feature at the start of the twenty-first century. Migration from the mountains to the Tarai is no longer about households coming to cultivate land but about families settling in peri-urban areas (our observations in Rupandehi and Sunsari), attracted by the facilities in the Tarai, such as roads, hospital access and boarding schools. This urbanisation takes place at the expense of agricultural land and results in a booming land market near cities and roads (Rimal et al 2018) and often becomes a platform for speculation. Driven by exorbitant land prices, farmers in peri-urban areas have opted for intensive farming and have developed market gardening (Gerboin 2014, Le Bideau and Naël 2015). Urbanisation along roads is similar to what has been observed in the Gangetic plain (Denis et al 2011): it is unplanned and the result of the multiplication of individual actions carried out by local actors. The administrative reconfiguration in 2017, which artificially increased Nepal's urbanisation from 17% to 62% (Chapagain 2018), epitomises the transformation of the rural space.

Despite this intense urbanisation, the Tarai remains Nepal's main paddy-producing region – 74% of national production on 71% of the paddy area (Government of Nepal 2020) – and, despite its small size, it houses 48% of the cereal-producing land (ibid). A significant proportion of its farmers rely on smallholdings and 'most small and medium landholding farmers are engaged in subsistence farming systems' (Sunam et al 2015). In Sunsari for example, 53% of farms are of less than 0.5ha, cultivating only 9% of the total area of the district in 2011. By contrast, farms of more than 2ha, which account for only 12% of farms, amount to 46% of the total area. Past agrarian reform efforts have not fully delivered their expectations, and population growth and property division by inheritance have led to a decrease in the size of most farms.

- Concerning the use of water for farming, a process of individualing water access can be observed. Formal water user associations continue to be created when a canal rehabilitation programme is undertaken, but collective infrastructures tend to be neglected by those who can access groundwater (Aubriot 2015). This access is mostly individual, with private investment, creating great inequality among tenants, small farmers and women (Sugden 2018). The government provides some aid but only to farmers who have set up farmer groups to purchase collective pumps. Here again, aid is less oriented towards communities as a whole and more towards farmers capable of meeting the APP objective in terms of increased productivity, competitiveness and efficiency. Farmers holding a property title (required in order to be eligible for subsidies) and with the social capital (required in order to be entitled to fill in a form and to discuss matters with engineers) are therefore privileged. Lastly, the process of the individualisation of access to water is also encouraged by the 1992 water law for the management of collective ponds (pokhari), which are auctioned off individually so that a single person can practise intensive fish farming (Sarrazin 2020). Most villagers who previously had direct access to this collective resource have lost it, while others benefit from the privatisation and marketing of pond products. A few Madheshi villages in Saptari are collectively trying to resist these developments (ibid).
- This post-2000 period is also characterised by a clear diversification of actors and forms of organisation in the agricultural sector. A new Cooperative Act was passed in 1992 and the Ninth Five-Year Plan (1997–2002) promoted cooperatives' involvement in commercial milk and vegetable production and in cash crops for export. Cooperatives developed massively from the late 2000s onwards, notably due to the 2007 Interim Constitution which recognised them as one of the three pillars of economic development along with the public and the private sectors (Ojha 2019). The banking sector and private companies, such as airlines, supported these cooperatives which flourished, going from less than 10,000 in 2006 to 34,000 in 2016 (ibid). At the same time, the creation of market-oriented farmer groups was encouraged by the National Agriculture Policy (2005) that 'aims at improving the living standard of the people by transforming subsistence agriculture into commercial, competitive and sustainable agriculture' (Rai et al 2016).
- NGOs continue to be involved in the agricultural sector. However, following the various conflicts that have shaken the country (the People's War, Madheshi movements¹⁸), their role has shifted from project implementation to supporting the rights of the marginalised (Tanaka 2011). In Chitwan and Nawalparasi districts, an NGO supports the Majhi, Bote and Musahar people who, due the creation of Chitwan National Park, have been displaced and have lost access to the river and fishing which provided them with subsistence (ibid). In the districts of Morang and Banke, programmes are being set up to cultivate vegetables in riverbeds to help the landless, a niche economy for generating farm income (Gurung et al 2012). Since 2007, these kinds of NGO projects have focused more on the excluded and the dominated.
- 42 Agriculture in Nepal, including in the Tarai, now involves a multitude of actors, which is seen by some as detrimental to its development: 'There are too many organisational layers in the development sector from international donors, international NGOs (INGOs), urban-based NGOs, rural NGOs, community-based organizations (CBOs) and user groups, to the people in need' (Tanaka 2011: 496). This situation is also characterised by multiple partnerships between government agencies, INGOs and

international cooperation, whereas previously each institution had its own project. It may have some counterproductive effects since 'new actors not only oppose the stateled developmental agenda, but also often oppose each other with various degrees of intensity, each proposing their own alternative development paths' (Sharma et al 2014: 535). Moreover, due to political unrest and the absence of elections at local level from 1997 to 2017, user groups as well as political parties have been involved in running local affairs, which has granted them some importance as local actors.

During this last phase, the poorest and the most socially deprived have been left by the wayside in development dynamics: individualisation of access to water resources and to resources distributed by the state, greater involvement of the private sector, intensive practices (mechanisation, battery farming etc), exorbitantly priced land and increasingly market-oriented agriculture. Only some NGOs are counteracting this trend by offering programmes to those left behind.

Conclusion

- As Nepal was never colonised, the cultivation of plantations and cash crops for export was not as important as in neighbouring India (Dorin et al 2009) or many other countries across Africa (Charlery de La Masselière 2014) and Asia (Scott 1976, Hayami 2000). The Tarai in the eighteenth and nineteenth centuries, with its low population density, was not part of the colonial international trade network (Hayami 2000) but was included in Nepal's developing economic system. Peasants of this so-called 'empty land' fed the nascent Nepalese Army and its administration, later practising an agriculture aimed at the domestic market. This article has shown that the management of agriculture in the Tarai has always been influenced by a combination of events related to international and national politics: the evolving relations with the British and the development of a national army; the closure of some international borders and the clearing of the Tarai; donor-driven development policies and increased control over the area.
- Since the 1950s, a radical transformation of the Tarai has taken place thanks to both public policy incentives and farmers' responses and initiatives. Though the state extorted farmers and had a minimal development policy until 1950, from then on it began to distribute international aid through investments in collective infrastructures and through its newly created institutions. At the same time, however, Nepal's land reform movement did not have the hoped-for redistributive effect observed in many South American countries (Jessenne et al 2016). At the end of the 1980s, the paradigm shift towards participatory management took place, responding to demands for structural adjustment, neo-liberal economics and decentralisation policies present in all countries of the Global South. During both of these phases, the Tarai served as a pilot area for reforms and development projects. In the 1950s, large-scale infrastructures were built by destroying peasant-built canals with no regard for local knowledge and by granting more importance to the knowledge of engineers (Liebrand 2017). In the 1980s–90s, participatory management was introduced, particularly in state irrigation systems established primarily in the Tarai. The Nepalese lowlands proved to be a prime location for donor-funded development projects. Yet the Tarai continues to lag far behind in many areas: there has been no Green Revolution programme as such (nor in the rest of Nepal); late electrification and an irregular supply of electricity for

many years have led to poorly developed groundwater irrigation (Bhandari et al 2006) often based on rudimentary or diesel-based facilities (Foster et al 2021).

- In spite of yields having plateaued out, agriculture in the Tarai has indeed improved, though not enough to ensure self-sufficiency, as opposed to neighbouring India which became a huge exporter of wheat and rice - with it even occupying first place in the world ranking of rice exports in 2014 (Landy et al 2015). Cereal farming does not attract new generations that are instead turning to market gardening and to growing other cash crops, types of agriculture better suited to small farms, to the proximity of road infrastructures, to pervasive urban encroachment and to the pressure on land. These types of agriculture also create a monetary income which, for some, substitutes migration remittances. These farmers thus respond to the objectives set by the government for an agriculture geared towards the market, especially the domestic market. Moreover, since the 2000s, the private sector has played an increasingly important role in financing cooperatives and market-oriented agriculture. Engineers from different state departments (agriculture, irrigation, forestry) still play an important role in the implementation of agricultural and resource management projects, and are part of the 'coalition distribution' in which bureaucrats, politicians and entrepreneurs league together to misappropriate funds. The disengagement of the state is therefore relative.
- Since 1985, there has also been an increase in the number of actors involved in agricultural development programmes. For villagers, this means a diversification of the possibilities of developing or benefiting from a project through NGOs, cooperatives, the private sector, government or international aid programmes, or by organising themselves into farmer groups to apply for a grant from the appropriate government department. The criticism made in the late 1990s (Agrawal et al 2005) remains valid: only those who have some knowledge about how development projects work, have the social capital and the necessary credentials (such as a title deed) can apply. The others, who represent a large part of the population (daily workers, sharecroppers, landless people), find themselves excluded. Moreover, recent transformations regarding water resources have been characterised by an individualisation of access to water and by a formalisation of access to collective water via the creation of formal groups in order to benefit from state aid. Similarly, we observe an individualisation and a socio-economic selection of access to aid and to the resources necessary for agriculture. Only a few NGOs have programmes to counteract this exclusionary trend.

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NOTES

- 1. We use the term 'Tarai plain' in the singular, but this does not discount the geographic diversity (relief, elevation, landscape, population density, ethnic composition) that characterises it, nor the diversity of the terminology this diversity generates (Tarai, Madhesh, Tarai-Madhesh) (Upreti et al 2013). As far as statistics are concerned, we have considered the figures for the 21 border districts, which cover 17% of national territory. The inner-Tarai or Duns, such as Chitwan or Dang, are therefore included.
- **2.** A project funded by the French National Research Agency (Projet-ANR-12-AGRO-0002). Our own data concern semi-directive interviews conducted among farmers in these districts, through more or less formal discussions held in their fields or houses.
- **3.** The Nepalese Central Bureau of Statistics clearly distinguished the Tarai from hill and mountain districts. Maps are produced according to this categorisation (as, for example, in the online atlas https://cbs.gov.np/catalog/atlas/eAtlasMap.html).
- **4.** Tharus are considered to be one of the plain's indigenous ethnic groups (*Adivasi*) and are statistically the largest group of lowland Adivasis (77%) although not all Tharus in Nepal share the same culture (language, customs, dress etc) (Guneratne 2002). Those of the districts of Chitwan, Dang, Siraha and Surkhet have been studied the most (Sharma et al 2021).
- 5. Jagir was 'land assigned to government employees as emoluments' (Regmi 1978a). Birta: 'land grants made by the state to individuals, usually on a tax-free and inheritable basis' (ibid).
- 6. District created in 1963 by dividing up Morang district.
- 7. Various definitions of Madheshi exist (cf Chaudhary 2011, Jha 2017). Some refer to all the populations from the Tarai plain (Hindu-caste groups, Muslims and Adivasis), except for populations originally from the hills (pahadi); others refer only to the Hinducaste population from the Tarai; and others still to Hindu castes and Muslims from the Tarai. The Madheshis are groups of people whose linguistic, marital, cultural and religious affinities are similar to those of people in Bihar and Uttar Pradesh. Some of them are from India or have Indian ancestors, but others settled a long time ago in these border areas; for these people, it is difficult to speak of 'native' or non-Tarai populations (in reference to the present boundaries), given the fluctuating boundaries and sovereignty of these areas prior to 1814. This difficulty in defining Madheshi is reflected in the statistics, where they are rarely grouped into a single category.

- **8.** In 2011, Morang and Sunsari still produced 90% of Nepalese jute (Government of Nepal 2012).
- **9.** *Kipat:* 'A form of communal tenure, as only members of certain ethnic groups [from the eastern hills] are permitted to own under this system' (Regmi 1978a:29).
- **10.** Raikar: 'State landlordism; land on which taxes are collected and appropriated directly or through intermediaries by the state' (Regmi 1978a). *Guthi*: 'a system of institutional landownership under which lands are endowed for religious and charitable purposes' (Regmi 1976:68).
- 11. Forest cover varied between districts: for example in the 1950s, in Rupandehi there were forests only in the northern range, whereas in Sunsari there were still some forests in the plain (see Picard's maps in this issue).
- 12. In 1964, the ceiling was nearly 17ha in the Tarai.
- **13.** They are called 'spontaneous' because farmers themselves are willing to migrate, although they are prompted to do so by reforms and development programmes.
- **14.** National parks are a means of asserting state control over nature and people to the point of a form of militarisation (Dongol et al 2021)
- **15.** Many studies from the late 1970s and the 1980s reported the inefficiency or low performance of so-called agency-managed irrigation systems (Shukla 2002).
- 16. The functioning of so-called 'traditional' irrigation systems in Nepal was taken as an example in the development of Ostrom's (1992) commons theory and of his Bloomington School (Locher, 2016), paradigms on which participatory management is based.
- **17.** The ex-kamaiyas turned out to be landless and jobless (Chhetri 2005), but some of them became a new political elite in squatter communities (Hoffmann 2015).
- **18.** The protests were particularly virulent during the period 2007–2008 and in 2015. For a recent update on Madheshi political movements, see Jha (2017).
- **19.** Note that the colonisation of India still had an impact on Nepal because it required labour, mainly from the mountains (Sagant 1978).

ABSTRACTS

This article presents a historical reconstruction of the development of the Tarai plain, which has been central to Nepal's agricultural policy. It focuses on the role of the state and the involvement of local actors in this development to show how state policies benefited some actors while excluding others. Starting in the eighteenth century, a critical period in the structuring of society and in the establishment of the elite, we show how the state selected its rural interlocutors according to specific characteristics during four historical phases characterised by dominant development paradigms. Firstly, from the unification of Nepal (late eighteenth century) to 1950 when land policies structured the relationship between the state and farmers. Secondly, in the 1950s–80s when public policies focused on collective infrastructures. Thirdly, from the mid-1980s to the 2000s when the participatory management paradigm emerged. Finally,

from the 2000s onwards with market-oriented agriculture and the increase in development actors and a very relative disengagement of the state. We show that the current trend is towards individualising access to water, individualising access to state-offered aid, and *de facto* exclusion of the disadvantaged from specific development programmes, with only a few NGOs countering this trend.

Cet article retrace l'histoire du développement de la plaine du Téraï qui a été au cœur de la politique agricole du Népal. Il met l'accent sur le rôle de l'État et l'implication des acteurs locaux dans ce développement afin de montrer comment les politiques de l'État ont bénéficié à certains acteurs et en ont exclu d'autres. En commençant notre étude au XVIIIème siècle, période critique dans la structuration de la société et dans la constitution de l'élite, nous montrons comment l'État a sélectionné ses interlocuteurs en milieu rural en fonction de caractéristiques spécifiques au cours de quatre phases historiques caractérisées chacune par un paradigme de développement dominant. Tout d'abord, depuis l'unification du Népal (fin du XVIIIème siècle) jusqu'en 1950, les politiques foncières ont structuré les relations entre l'État et les agriculteurs. Deuxièmement, dans les années 1950-1980, les politiques publiques se sont concentrées sur les infrastructures collectives. Troisièmement, du milieu des années 1980 aux années 2000, le paradigme de la gestion participative a émergé. Enfin, à partir des années 2000, l'agriculture de marché, l'augmentation du nombre d'acteurs du développement et un désengagement très relatif de l'État ont eu lieu. Nous montrons que la tendance actuelle est à l'individualisation de l'accès à l'eau et à l'aide publique, et à l'exclusion de fait des populations défavorisées de programmes de développement spécifiques, seules quelques ONG venant contrecarrer cette tendance.

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Keywords: Nepal, Tarai, agriculture, irrigation, land use, state, local actors

Mots-clés: Népal, Téraï, agriculture, irrigation, utilisation des sols, état, acteurs locaux

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