

KĀMI (BLACKSMITHS) TODAY: FORESTS AND LIVELIHOOD SECURITY

Elvira Graner

Innumerable studies about Nepal have pointed out the severe degradation of forests in the country (Robbe 1954; Willan 1967; Eckholm 1975, 1976; Bajracharya 1983; Messerli & Ives 1991; Joshi 1994, to name only a few). Some of these studies have gone one step further and have included aspects of utilisation and have looked at the impact of degradation upon the local population. At the same time there is a vast body of studies on (environmental) policies, which also, or primarily, include issues of implementation and impact of these policies. Yet only a few studies have focused upon analysing different social groups and upon differentiating the impact that either forest degradation or the implementation of (environmental) policies have upon these different social groups, and upon their working and living conditions. One of these studies was undertaken in Sindhupalchok district (Central Development Zone), monitoring the implementation of the recent forest policy by analysing the composition of forest user groups and access to forest products by members and non-members of these groups (Graner 1996). The aim of the study was to assess whether or not it is primarily people from "poor sections of society" who are included in these groups, as is suggested by the Forestry Master Plan.

The notion of dependence upon forests and forest products is prevalent in almost all studies which analyse rural livelihood systems (as pinpointed by Joshi 1994: i). All rural households heavily depend upon access to forests and forest products, such as fodder for feeding livestock, which forms an important component of rural subsistence; for firewood in order to process food; and for timber, needed for the construction of houses but also for agricultural tools, as for instance ploughs. Yet there is one group from the occupational castes who rely upon access to forest products not only for their household consumption but also for performing their traditional occupation, namely *Kāmi* (blacksmiths). Charcoal, besides iron, is the major input needed for the performance of their traditional occupation and is customarily made by the *Kāmi* themselves. Thus forests are a most vital

resource for them and access to forests determines whether or not they are able to perform their traditional occupation.

The study mentioned above has undertaken several case studies in two areas of the Melamchi Khola region in Western Sindhupalchok, in Kiul VDC (High Mountains) and in Melamchi VDC (Middle Mountains) in 1992–94. The present paper will present one of these case studies undertaken on *Kāmi* from Kiul VDC, in order to illustrate the vital role access to forest has for their traditional occupation. Traditionally there were plenty of forests where they could go to, either near to their settlements or at higher altitudes in Kiul VDC (about 2000–2800 m) or in the northern neighbouring Timbughyangyl VDC. During the last decades access to forests has become increasingly restricted, as pressure upon them for both firewood and fodder is high and the high demands of firewood needed in order to make charcoal impose an additional and often rejected stress upon the forests. At higher altitudes access has not been restricted for a long time but when Langtang National Park was established in 1978 and came to include the northern Helambu area legal access became extremely restricted. This control was physically experienced by two *Kāmi* who when making charcoal north of Shermatang in 1985 were caught by rangers, had their charcoal confiscated and were detained for one night.

To the south there is a forest which was one of the first in Sindhupalchok district handed over to a user group (DFO, Operational Plan # 12). This user group comprises of Brahmin, Chhetri and Tamang households, but does not include any members from the *Kāmi*. Membership was based upon traditional rights and utilisation patterns and because the *Kāmi* had no such traditional rights to this forest they were not included in the user group.

As an introduction this paper will give a short summary of the recent forest policy, in order to make the study comprehensible for those who are less familiar with this topic. It will proceed to give a short framework for access to forests and forest products. The main part of the paper will concentrate on *Kami* and their traditional work and clientele. In its last chapter it will assess the impact of the recent forest policy upon this group, as was encountered in the case study.

Contemporary Forest Policies in Nepal: A Short Introduction

The forest legislation of the 1960s was primarily aimed at protecting forests "against" the utilisation of the local population. This policy was substantially modified during the late 1970s when the Panchayat Forest and Panchayat Protected Forest Rules (HMG/ML&J 1978) were formulated and again in the Master Plan for the Forestry Sector (HMG et al. 1988). The latter incorporated the idea of user group management prevalent in the

decentralisation policy of the early 1980s (HMG/ML&J 1982), then introduced as the main means of (participatory) development. This new policy line aimed at a wide public participation by handing over all accessible forests to user groups, rather than to political bodies as was done before, in order to promote management and utilisation. Later on, these recommendations have been legislatively backed by the new Forest Act (HMG/MLJ&PA 1993a) which repealed the previous laws, the Forest Act (HMG/ML&J 1961) and Forest Protection (Special Arrangement) Act (HMG/ML&J 1967)(for details see Graner 1996).

Besides the recognition of the need for public participation both Master Plan and the Forest Act also took up broader aims of development policies, such as the commitment to secure basic needs, as laid down in the Basic Needs Fulfillment Programme of 1985 (HMG/NPC 1987). There, basic needs were quantified in terms of five main indicators, i.e. food, clothes, housing, education, and health but also qualified in terms of "security", by addressing the need for guaranteeing "smooth supplies of essential commodities as rice, pulses, sugar, firewood, salt, kerosene, &c" (ibid.:36). The latter, especially the need for firewood, is increasingly recognised and repeatedly stated as an issue of security of basic needs (Seventh Five-Year Plan: HMG & al 1985:36; Eighth Five Year Plan: HMG et al. 1992:41; Dhakal 1993:2), and also as the first issue of the policy objectives of the Forestry Master Plan:

- satisfaction of basic needs (for fuelwood, timber, fodder);
- sustainable utilisation of forest resources;
- participation in decision-making and sharing of benefits; and
- socio-economic growth (HMG/ADB/FINNIDA 1988a: 8/9).

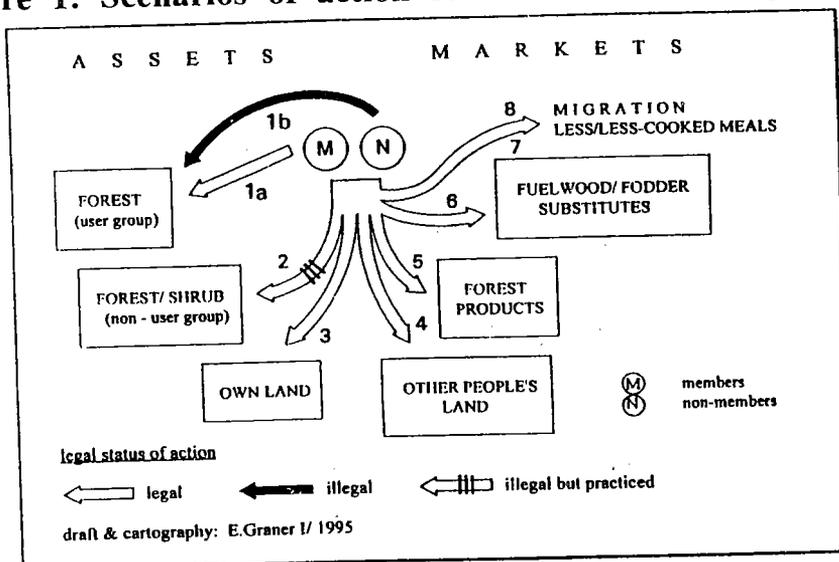
The chapters elaborating on these four issues include several statements of further interest. One is the assumption that through the effective conservation and utilisation of forests at the local level, it is possible to "fulfil a number of multi-faceted economic necessities of the nation - fuelwood to cook food; charcoal and raw material to keep the industries running; timber to build houses; fodder for animal husbandry" (ibid.: 4). Another one is that on a national level "the multitudes contribution from the forestry sector must be channelled in ways which provide maximum benefits to both the local and the national economies. Special attention must be paid to the poorest segments of society" (ibid.). These concerns about the securement of basic needs and the commitment to pay "special attention" to the poor are again taken up in the "Forestry Sector Policy" (ibid. 1988b) which states that "Priority will be given to poorer communities, or to the poorer people in a community" (ibid.: 10).

According to the recent Forest Act (HMG/MLJ&PA 1993) these objectives are to be achieved by organising the population into forest user groups, defined as "the concerned users of a forest desirous of developing and conserving it and using the forest products for collective benefit. [They] may form a user group and apply for registration to the District Forest Office" (ibid.: Chapter 9/41-42). After this formal registration the members of the user groups are granted legal access to utilise forests. On the other hand, non-members are effectively excluded from access to these forests, a restriction implemented by the members of user groups far more strictly than before under ("blind eye") HMG protection. Therefore membership within such a group has become an extremely crucial issue as it not only determines legal access to forests but in case of exclusion from membership implies losing actual access at the same time.

Access to Forest Products: A Framework for Analysis

In conceptualising access to forest products one has to distinguish various potential sources, both public and private ones ("assets", in Swift's terminology; see Figure 1). Public resources are mainly forests or shrub areas, and access has traditionally always been a local right, yet one which was legally withdrawn (yet practised) during the 1960s and early 1970s. This access may now again be obtained, when user groups are formed and registered. Private sources are mainly one's own land or other people's land. In addition, supply may exist through markets, both for firewood or firewood substitutes, a type of access which is becoming of increasing importance to some groups.

Figure 1: Scenarios of action for access to forest products



Yet it is an important feature to recognise that in highly-stratified societies with unequal access to productive resources "scenarios of action" are likely to be different for different sections. Whereas some groups can easily supply their needs from either private land or from markets, others may not be in a position to do so. Thus public "common property" forests and shrub areas (not in a legal but in a matter-of-fact sense) are likely to play a different role for different sections of society. Whereas for the former group it may not make any difference whether they are excluded from access to communal resources or not, for the latter, who are not in a position to secure their needs by relying on their own resources and who heavily depend on access to communal resources, it will make a significant difference if they are cut off from these resources.

The recent forest policy, as laid down in the Master Plan for the Forestry Sector (HMG et al. 1988) and the Forest Act (HMG/MLJ&PA 1993), aims at modifying these "scenarios of action" by handing over all accessible forest to user groups and by allowing the members of these groups to utilise (a part of) these forests (see Figure 1; 1a). Utilisation is to be carried out in ways regulated by the operational plan set up in co-operation of the members of the user group and staff of the respective District Forest Office (DFO). At the same time it is the stated objective of the Forestry Master Plan to "secure basic needs", presumably to "the needy".

Yet this commitment is severely challenged by the fact that there is no unlimited scope for forming these groups as both the availability of forests and their sustainable utilisation are extremely limiting factors, especially in densely populated and/or scarcely forested areas of Middle Mountain Valleys but also in some High Mountain Valleys. If there are not sufficient forests to secure sustainable utilisation for the total population, then access necessarily will either have to be restricted for all people or only be permitted for a limited number of people who can "sustainably" utilise the forest. Thus the assumption that especially lower income groups will benefit from the new approach may be a noble intention but at the same time extremely difficult to achieve.

The *Kāmi* of Kiul VDC

In Kiul VDC there is a total of 37 *Kāmi* households, accounting for 4.1% of the total population, i.e. a percentage similar to the district average of Sindhupalchok (3.7 %; HMG/ NPC/ CBS 1993). Most of these households (27) live in Ward 5, where one hamlet is located at an altitude of about 1050–1100 m and a second one at an altitude of about 1500 m, just below a Yolmo-(Sherpa) settlement. Yet, today only 12 *Kāmi* households from Ward 5 (44%) still work in their traditional occupation, sharing a total of 7 smithies, usually among several brothers.

There are no family histories on when the *Kāmi* migrated to this area and where they originally came from. Most likely they migrated in association with the Brahmins, who live close by, and received some land in order to secure their subsistence needs in return for the services rendered to the Brahmins. Their clientele, the so-called *bista*¹, the Nepalese equivalent of the Indian *jajmani*-system, comprise not only of Brahmins but also Tamang, Chhetris, Magar and *Damāi* (tailors), all local residents, as well as Yolmo-(Sherpa) from villages at high-altitudes and northern areas. The *Kāmi*'s duties are to make new agricultural tools, like *khukuri* (long knives), *hassia* (sickles), *koḍāli* and *koḍale* (small spades) and *phāli* (iron part of ploughs) and to repair and to sharpen old tools whenever needed by their clientele (for details of work performance see Höfer 1972; 1976). These items are manufactured at a smithy (*aran*), which is often shared by several brothers. Services are usually rendered once or twice a year for a total of about three days, especially before the *dasai* festival in mid October.

In return for their services the *Kāmi* receive an annual wage, usually paid in kind, the so-called *bāli* ("harvest"), comprising of a small share of their clientele's grain production, the so-called *bhāg* ("share"). This is received for several types of grain, maize (*makkaiko bhāg*) and/or millet (*kodoko bhāg*) but also for paddy, the so-called *kalla bhāg* (share received at the threshing place for paddy). In addition to these payments *bista*-households give extra food to their *Kāmi* at the main Hindu festivals (*dasai*, *tihār* and *māgh sakrānti*), either in form of rice or flour, and at *dasai* there is the custom of giving them the neck of the *khasi* (male goat). Besides these annual payments the *bista*-system traditionally incorporated elements of social security as the *Kāmi* usually approached their *bista*-households in times of food and cash scarcity. Thus the *bista*-system at one hand guarantees a certain minimum of both labour opportunities and food but on the other hand also implies a high degree of dependence and stagnation. Besides, the clientele needs to be divided among the sons after the father's death, which often minimises clientele substantially, especially when there are more than three or four sons.

Today most *Kāmi* households, along with other occupational castes, are one of the poorest communities of the area. Only a few *Kāmi* still work in their traditional occupation whereas all others support themselves by agriculture and by additional wage labour. But local labour markets are limited mainly to low-wage *khetālā* (agricultural labour) and scarce portering opportunities. Development policies have only affected some of the households, mainly those with a relatively high access to land who have stopped working as *Kāmi* some time ago. Thus it is a prevalent feature that those households are much better off who do not work as *Kāmi*, whereas

most households who still work as *Kāmi* often have difficulties to secure their subsistence. Asked for the main limitation for working in their traditional occupation the immediate answer is that it has become increasingly difficult to find firewood in order to make the charcoal needed for their work, due to heavy restrictions imposed on the cutting of firewood. This situation was not altered when a forest user group was formed and registered for a close-by forest, as none of the *Kāmi* households was included as a member. Only one or two *Kāmi* profit indirectly as they have better access to firewood for charcoal via some members of the user group who are within their *bista*.

***Kāmi* workshops and their clientele (*bista*)**

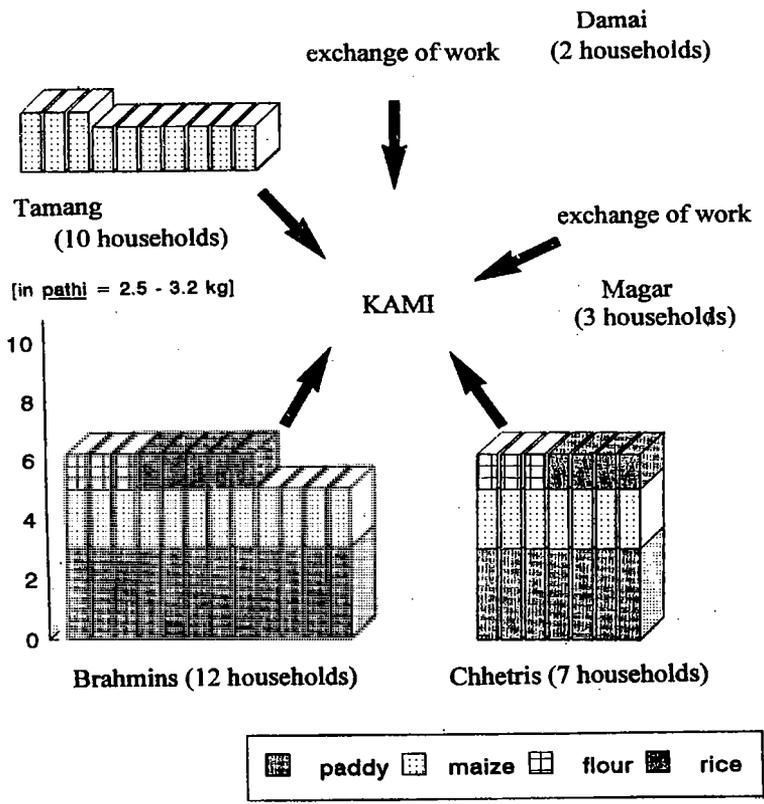
In ward 5 of Kiul VDC there are five smithies where *Kāmi* still regularly work for their clientele (*bista*). Two others exist where *Kāmi* repair or sharpen old tools or occasionally even make new tools. Yet most of them have stopped to perform regular *bista* services. Today most of the *bista* comprise of about 20–40 *bista*-households, whereas some are smaller. Sizes are thus similar to the ones reported by Euler (1984: 80) for Kabrepalanchok district (20–30 households). On the other hand Höfer (1976) reports for his study area (Western or Central Nepal) that *bista* comprise of 5–95 households (ibid.: 355), similarly Bouillier (1977: 104) for Kabrepalanchok, where sizes of *bista* are also 20–100 households.

Bista relationship is close to barter economy as annual wages are usually paid in kind (*bāli*) rather than in cash and changes over the past decades have been minimal². The share of grain received is about 1–3 *pāthi* (about 2.5–3 kg per *pāthi*) per crop, but usually only one or two types of grain are handed over, amounting to about 2–5 *pāthi* (5–15 kg). Yet information given on annual wages varies strongly whether it is given by the *Kāmi* or by their clientele, as some Brahmins claim that they give more than 10 *pāthi* (25–30 kg)³. Arrangements are slightly different for the *Kāmi* at higher altitudes who mainly render their services to *bista*-households of Tamang, Yolmo-(Sherpa) and Lama communities located at high-altitude regions where cropping patterns are different. These households give either millet and maize, in quantities of about 4 *pāthi* each, or about 8–10 *pathi* of potatoes.

Out of 12 *Kāmi* households of Kiul VDC (Ward #5) who still perform their traditional occupation (see Graner 1996) *bista* relations of one *Kāmi* household will be given in order to exemplify contemporary conditions for *bāli* (annual wage) received (see Figure 2). This *bista* comprises of 34 households, mainly Brahmins (12 households) and Chhetris (7 households) but also some Tamang, *Damāi* (tailor) and a few Magar households. The

payments in kind are made according to the households' production, and as most Tamang are similarly grain-deficit they only have to hand over 1.75 – 2 *pāthi* of maize, whereas Brahmins and Chhetris have to give 3 *pāthi* of paddy (7.5 kg, equivalent to about 5.1 kg of rice) and also 2 *pāthi* of maize (about 6.2 kg). At festivals some *bista* households additionally have to give 3/4 – 1 *mana* of either (wheat) flour or rice (about 0.425 kg rice). These payments in kind given by all *bista*-households amount to about 3 *muri* of paddy (about 100 kg of rice)⁴ and 2.85 *muri* of maize. Thus the total amount of grain (110 *pāthi*) received as *bāli* is only slightly lower than in Euler's (1984) study, who mentions 120 *pāthi* (ibid.: 88). Other groups, such as occupational castes, in this case *Damāi* (tailors) from the neighbouring Ichok VDC, do not hand over grain but exchange labour services whenever needed. The same applies to three Magar households who also exchange labour needed by the *Kāmi* for either construction work, as for instance the changing of the straw-roof, or when trees have to be cut for the making for charcoal.

Fig. 2: *Bista*-arrangements for *kāmi* workshop in Kiul



Source: Field data 1993/94

Graphic: Graner V/1995 (following Bronger 1986)

Inputs and Interlinkages to Market Economy

Interlinkages to the market economy occur when charcoal or iron for new tools are needed. Iron for new tools usually has to be provided by the customers who when ordering new tools first consult the *Kāmi* on quantities of iron needed. They then provide about double the amount needed for their tools as a sort of additional in-kind payment, along with a small payment in grain of usually 1 *pāthi* (2.5–3 kg). This system guarantees that the *bista*-households rather than the *Kāmi* are subject to changes of market conditions. Prices of iron have risen about 50% during the last decade (see Table 1), i.e. are only slightly higher than general inflation.

The second major input needed for the *Kāmi* is charcoal. Whereas traditionally there were plenty of forests where charcoal could be made, today the main (legal) source of making charcoal for most *Kāmi* is the purchasing of firewood, either from registered forest user groups or from private sources. If available from forest user groups costs are rather nominal (1-5 Rs/*bhāri*; about 30–40 kg) whereas if purchased from private sources prices are generally significantly higher (10-15 Rs/*bhāri*), although much lower than at Melamchi Bazar, where rates have increased to about 40–70 Rs/ *bhari* by November 1994 (see Graner 1996). As a minimum of 8 *bhāri* is needed in order to produce 1 *bhāri* of charcoal and the workshops need an annual minimum of about 10–12 *bhāri* of charcoal annual expenditure on charcoal may well be 1,000–1,500 Rs. Prices have risen exorbitantly (i.e. 8–10 fold) during the last decade (see Table 1) and demand significant financial inputs. Whereas price fluctuations of iron are usually buffered by the *bista*-households, prices for firewood and charcoal are not. Thus the scarcity of firewood affects *Kāmi* households and their work more than anybody else.

Table 1: Market prices for iron and charcoal (1973 - 1993)

INPUTS	1973	1983	1993
iron [Rs/ <i>dhāmi</i>]	30 - 35	40 - 43	60 - 72
iron [Rs/kg]	12 - 14	16 - 17.20	24 - 28.80
charcoal [Rs/ <i>bhāri</i>]	8 - 16	24 - 40	80 - 120

source: *Kāmi* from Kiul VDC

Alternative Sources of Securing Subsistence Needs

In terms of subsistence needs the quantities of grain received as *bāli* (110 *pāthi* = 5.5 *muri*) are sufficient for the annual food requirements of about one adult whereas for households of 3 to 4 adults (or two adults and several children), it is sufficient for 3 or 4 months. Thus there arises the urgent

need to supplement in-kind incomes from the traditional occupation by other sources. As the household analysed above does not own any agricultural land grain can only be obtained from *khet* and *bāri* fields cultivated as tenants under *kut/adhiyā* arrangements where about 50% of the main produce has to be handed over to the respective land owner or *guthi-temple*. The share that remains to this particular household are a total of 17 *muri*, comprising of 5 *muri* of paddy, 4 *muri* of wheat and 8 *muri* of maize and millet.

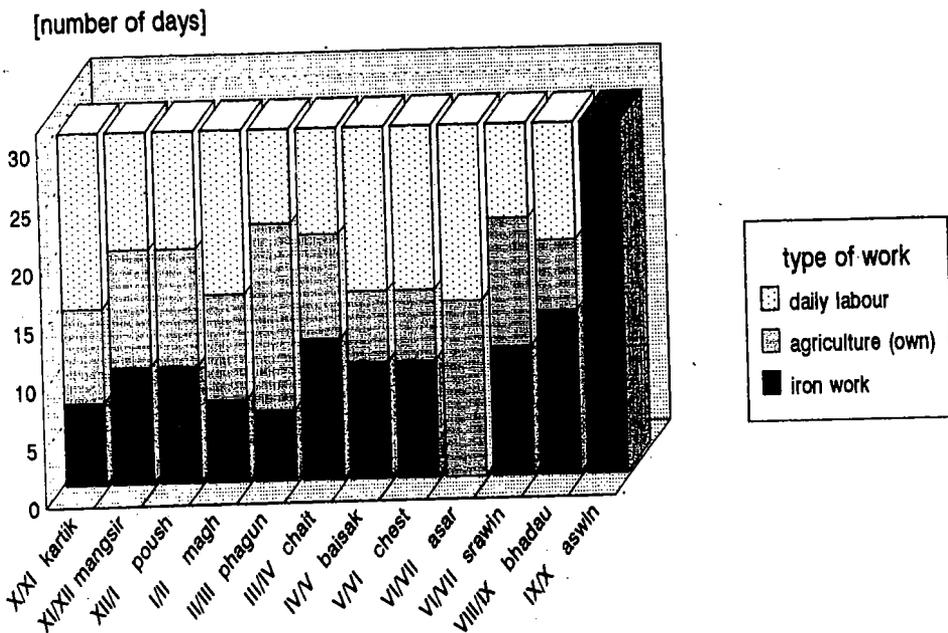
This calculation reveals that only a comparatively small share of the annual subsistence needs are secured by in-kind incomes from their traditional occupation whereas far more is derived from agriculture on rent-in fields. Yet this implies a substantial input in time, a pattern which is reflected in the monthly working calendar of this *Kāmi* (see Figure 3). Yet, although these annual incomes in kind seem to be fairly low on first sight, it is an important source of household food supply especially for paddy. This is especially important as most of the paddy production from rent-in fields has to be handed over as in-kind interest rates to creditors.

On the other hand it is also apparent that this household can not secure its subsistence needs, neither from the traditional occupation nor from their agricultural production, a condition which applies for many *Kāmi* households, whether still active in their traditional occupation or not. Thus, most of them have at least some family members who work as daily wage labourers, mainly in agriculture. Some men have traditionally worked as porters, especially for villagers from high altitude or northern areas where portering demands are extraordinarily high, due to the fact that most of the food has to be brought into these villages from other, higher-productive regions. Besides, both men and women usually work as agricultural labourers, the same applies to children, who are generally included into the labour force at a fairly young age.

The importance of daily labour in their annual labour scheme is shown for the *Kāmi* household who has been analysed above (see Figure 3). In most months daily labour is carried out for about 10 - 12 days and thus amounts to a similar time allocation as the performance of the traditional occupation. Only the month of *āswīn* (September/ October), before the *dasai* festival, is still dominated by their traditional iron work. Yet local labour markets usually have unfavourable conditions for people in need of work especially when they are indebted to the persons supplying labour opportunities. Thus, migration to either the Terai or to India is high, about one third of all males have been away or still are. Usually husbands leave their families behind, who then either live on their own or (usually) with one of the man's brothers. Most of these migrating men do not know where other villagers

are and look for their own opportunities, as stated by all. Asked whether collective search for work is not easier and possibly more successful some agree yet most of them plan to carry on on their own. At the same time, illiteracy is perceived as a strong limitation for migration, as stated by both men and women. On the other hand, it is prevalent not only in the parent generation but also among the children, irrespective of the fact that there are two primary schools in the area. Whereas about half of all children from the upper hamlet attend classes it is only one boy from the lower hamlet. Thus, chances for better qualified types of work are low also for the future.

Fig. 3: Annual working calendar of a *kāmi* (blacksmith)



Kāmi: Their Access to Forests

The present case study has shown that it is difficult for *Kāmi* households to secure annual subsistence needs for all members of the household. Arrangements for in-kind payments (*bāli*) from their clientele households (*bista*) have traditionally been low in this region and are only sufficient if *bista* are large. Thus, production from own fields is a vital component in order to meet subsistence needs. Yet, for many households access to fields mainly - or even exclusively - exists in form of tenancy, where only half of the produce accrues to the cultivator, who above all, does not hold any tenancy rights. Thus, many of the *Kāmi* households are left off with securing their subsistence by working as daily labourers and with including their children into their household's labour force at an early age.

Above all, the performance of their traditional occupation is threatened from several sides. Fuelwood for charcoal is increasingly difficult to obtain and this is a curtailment which poses a severe burden upon all *Kāmi* workshops. Whereas traditional arrangements between *Kāmi* and their clientele contribute significantly to secure household food security and also to buffer the workshops from price inflation of iron it unfortunately does not sufficiently buffer the workshops towards an increasingly restricted access to forests. In addition, this inflation of costs for charcoal is strongly opposed to the dumping costs at which substitutes for these manufactured items, mainly from Indian origin, are available at market centres. This process of substitution is in full swing in the Terai and will certainly also find its way even to the most remote areas, gradually further reducing sizes of *bista*.

In order to counteract these difficulties, the assignment of forests to *Kāmi* would be a possible strategy. Yet including *Kāmi* in forest user groups poses an extreme burden upon the other members of these groups, and one which is usually rejected. This was also the case in the present study, when a forest user group was formed for a close-by forests which comprises of Brahmin, Chhetri and Tamang, excluding all *Kāmi*. As the utilisation of the forest has not been possible for a long period of time, the formation did not affect the *Kāmi* negatively. Yet, one more potential source of access to forest products has been lost, along with a possible chance to contribute to securing access to this decisive input for a traditional occupation.

Access to Forest Products: A Framework for Analysis

In conceptualising access to forest products one has to distinguish various potential sources, both public and private ones ("assets", in Swift's terminology; see Figure 1). Public resources are mainly forests or shrub areas and access has traditionally always been a local right, yet one which was legally withdrawn (yet practised) during the 1960s and early 1970s. This access may now again be obtained, when user groups are formed and registered. Private sources are mainly one's own land or other people's land. In addition, supply may exist through markets, both for firewood or firewood substitutes, a type of access which is becoming of increasing importance to some groups.

Notes:

1. Höfer (1972) in his study on *Kāmi* in Western (Central ?) Nepal mentions that there is a (folk) etymology that the term *bista* is derived from *bis* (20), denoting that payments for *Kāmi* originally comprised of twenty different items (ibid.: 36).

2. These findings differ strongly from Bouillier who in 1977 suggested that the traditional bista system is disappearing fast in Nepal" (ibid.: 109).
3. These rates are similar to the ones mentioned by Euler (1984:80) who gives a list of 20†households who hand over 2 - 7 *pāthi* (and 13 *pāthi* in one case) as a "Kāmi *bāli*". On the other hand Bouillier (1977: 104) states that "rich people hand over 10 *pāthi* of paddy, 1 *pāthi* of wheat, about 4 *pāthi* of maize [i.e. one basket of maize cobs], and at *dasai* 2 *mānā* of both rice and *chiurā* (beaten rice) and about 10 kg of meat. Yet she does not give details about quantities handed over by "poor" households. The same applies to Höfer who also only mentions one uniform rate, comprising of about 4 *pāthi* of maize [one basket of maize cobs], 3 - 6 *pāthi* of millet, 1/2 *pāthi* of paddy, a handlong piece of meat (from the neck) at *dasai*, as well as snacks of dried meat, a handful of rice, salt, chilli, and beer at other festival occasions (about 6 times a year).
4. About 2.85 *muri* (57 *pathi*) are handed over in form of paddy (3 *pāthi* from 19 households) and about 0.3 *muri* (6.75 *pathi*) in form of rice (6.75 *pāthi* of paddy = 3.37 *pāthi* of rice; 0.1 - 0.125 *pāthi* from 9 households at about three festivals per year).

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