Editors-in-Chief: José I. Cabezón and David Germano
Guest Editors: Ken Bauer, Geoff Childs, Andrew Fischer, and Daniel Winkler
Book Review Editor: Bryan J. Cuevas
Managing Editor: Steven Weinberger
Assistant Editors: Alison Melnick, William McGrath, and Arnoud Sekreve
Technical Director: Nathaniel Grove

Contents

Articles

• Demographics, Development, and the Environment in Tibetan Areas (8 pages)
  – Kenneth Bauer and Geoff Childs

• Tibetan Fertility Transitions: Comparisons with Europe, China, and India (21 pages)
  – Geoff Childs

• Conflict between Nomadic Herders and Brown Bears in the Byang thang Region of Tibet (42 pages)
  – Dawa Tsering and John D. Farrington

• Subsistence and Rural Livelihood Strategies in Tibet under Rapid Economic and Social Transition (49 pages)
  – Andrew M. Fischer

• Biodiversity Conservation and Pastoralism on the Northwest Tibetan Plateau (Byang thang): Coexistence or Conflict? (21 pages)
  – Joseph L. Fox, Ciren Yangzong, Kelsang Dhondup, Tsechoe Dorji and Camille Richard

• Nomads without Pastures? Globalization, Regionalization, and Livelihood Security of Nomads and Former Nomads in Northern Khams (40 pages)
  – Andreas Gruschke

• Political Space and Socio-Economic Organization in the Lower Spiti Valley (Early Nineteenth to Late Twentieth Century) (34 pages)
  – Christian Jahoda

• South Indian Tibetans: Development Dynamics in the Early Stages of the Tibetan Refugee Settlement Lugs zung bsam grub gling, Bylakuppe (31 pages)
  – Jan Magnusson, Subramanya Nagaraj Rao and Geoff Childs

• Temporary Migrants in Lha sa in 2005 (42 pages)
  – Ma Rong and Tanzen Lhundup

• Exclusiveness and Openness: A Study of Matrimonial Strategies in the Dga’ Idan pho brang Aristocracy (1880-1959) (27 pages)
  – Alice Travers
The Mushrooming Fungi Market in Tibet Exemplified by *Cordyceps sinensis* and *Tricholoma matsutake* (47 pages)
  – Daniel Winkler

Interpreting Urbanization in Tibet: Administrative Scales and Discourses of Modernization (44 pages)
  – Emily T. Yeh and Mark Henderson

**Text Translation, Critical Edition, and Analysis**

The Sweet Sage and *The Four Yogas*: A Lost Mahāyoga Treatise from Dunhuang (67 pages)
  – Sam van Schaik

**A Note from the Field**

Population, Pasture Pressure, and School Education: Case Studies from Nag chu, TAR, PRC (21 pages)
  – Beimatsho

**Book Reviews**

  – Matthew Akester

Review of *Rulers on the Celestial Plain: Ecclesiastic and Secular Hegemony in Medieval Tibet. A Study of Tshal Gung-thang*, by Per K. Sørensen and Guntram Hazod, with Tsering Gyalbo (7 pages)
  – Bryan J. Cuevas

**Abstracts**

**Contributors to this Issue**
Abstract: This article reflects on the pivotal role of subsistence in the livelihood strategies of rural Tibetan households within the context of rapid economic and social transition. It argues that subsistence is valued by these households because it provides the material foundations upon which they can choose to act in a variety of strategic ways in response to dislocating change. First, the apparent paradox between income poverty and asset wealth is examined and the concept of “subsistence capacity” is suggested as a lens to understand aspects of wealth that are difficult to capture through conventional income or human development measures. Second, this paradox is related to the resistance of many rural Tibetans to relying on low wage manual jobs as a main source of income, despite the fact that such jobs would seem to be the most appropriate for their transition out of agriculture given their apparent income poverty and their low levels of education. The argument commonly cited in the Chinese literature that this employment behavior derives from “backwardness” is contended. The article concludes with a reflection on the consequences of recent government resettlement strategies in pastoral areas.

Introduction

From the perspective of data on per capita GDP, household income, and expenditure, Tibetan farmers and herders are among the poorest in China. They...
are also the poorest according to a variety of human development indicators, particularly those relating to education and health. These data seem to indicate that rural Tibetans are at the bottom of the labor hierarchy in China and that their increased integration into low wage employment would be progressive. This is supported by findings that wealthier Tibetan rural households derive more of their income from off-farm labor than their poorer neighbors. Indeed, in my earlier work, I argued that Tibetans are in urgent need of expanded (albeit protected) low-skill, off-farm employment that matches their low education levels. This conclusion is obviously based on the assumption that, if and when such employment would be available, farmers and nomads would welcome it.

However, several conundrums continuously nagged me in this extrapolation. The first, which I confronted before my field work in Tibet, is that rural Tibetan households are not necessarily the poorest in China according to the official data on rural assets. In fact, they are the richest. One might argue that this is simply a statistical reflection of different agricultural systems, whereby pastoralism is much more asset-intensive without necessarily implying greater wealth, and thus Tibetans may still be the poorest of China, all things considered. However, this logic was not necessarily confirmed in the field: compared to the average farmer in Sichuan, the average rural Tibetan often appears fairly well off, particularly in terms of housing or conspicuous consumption, or their ability to take leisure, to remain unemployed for extended periods of time, to travel on long pilgrimages, to offer free labor to monasteries, among many other examples.

Accordingly, I confronted the second puzzle in my fieldwork. At the risk of making a gross generalization, according to my typical observations, rural Tibetans, particularly in pastoral areas, did not act as if they were the poorest of China, at least not in ways one might expect in terms of their wage and non-wage expectations in comparison to Chinese workers. Instead of readily accepting menial work at the

---


lowest rungs of non-farm labor, many rural Tibetan households appear to voluntarily abstain from these stigmatized forms of work while targeting more coveted employment options through the selective education and migration of certain family members. While these attitudes may well derive from cultural notions of dignity, what is interesting is the freedom to act in accordance with these notions, rather than being forced into undignified labor at any wage, as we would expect of those who are truly compelled by poverty.

The combination of these observations would seem to suggest that the relative asset wealth of Tibetans trumps their relative income poverty when it comes to the factors influencing employment behavior. In much of the Chinese literature, as represented by the influential work by Xiaoqiang Wang and Nanfeng Bai, this is often explained as an aspect of irrational backwardness, which undermines productive accumulation and development. Although less explicit, similar assumptions also underlie much of the generally derogatory attitude towards “subsistence agriculture” within both policy and academic circles of development studies, insofar as subsistence is usually seen as either a cause or a symptom of endemic poverty in the developing world, Tibet included. In both cases, much effort is made to explain why peasants would act in ways that preserve their basis in subsistence agriculture even though such a course of action is ultimately a dead-end strategy, doomed to result in fragmented landholdings and chronic poverty.6

This article assesses these various interpretations by examining the role of subsistence in rural household livelihood strategies within the context of rapid economic and social transitions out of agriculture. I argue that subsistence is valued by these households precisely because it provides the material foundations from which they can choose to act in a variety of strategic ways in response to dislocating change. Accordingly, when faced by rapid change, such households aim to maintain an asset base at a level sufficient to meet minimum subsistence needs. Furthermore, these strategies are not necessarily contradictory with market integration. Rather, subsistence-based strategies can often be complementary with market integration, although they generally aim to avoid subordinated forms of labor commodification.

The article is divided into five sections. It first starts with an explanation of research methods and data. The second section then examines the apparent paradox between income poverty and asset wealth. The concept of “subsistence capacity” is used as a device to understand aspects of wealth that are difficult to capture through conventional measures but that have an important bearing on wage and employment expectations, and thus on livelihood strategies. The third section explores further certain aspects of these Tibetan employment and livelihood strategies. The fourth section concludes by reviewing and analyzing the empirical evidence presented. The final section looks forward to implications for policy and further research.

---


strategies in the context of rapid economic transition, as commonly observed in the field. The fourth section contends with the argument of Wang and Bai that these strategies are symptoms of “backwardness.” Instead, they can be seen as strategies aimed at resisting demotion in dislocating labor hierarchies, and as such, subsistence-maintenance strategies are better understood as forms of wealth protection rather than stemming from an anti-developmental logic. The article concludes by reflecting on the consequences of recent government resettlement strategies in the pastoral areas of Qinghai, Gansu, and Sichuan.

**Research Methods and Data**

This study is derived from a larger interdisciplinary research project examining Chinese development strategies in Tibet, here referring to all the Tibetan areas in Western China and not just those of the Tibet Autonomous Region (TAR). Although the scope of this project sacrificed specificity for generality, the aim was to provide a framework for understanding the evolution of Tibet as a regional system, as distinct from other regions in China. Given limited access to data and the difficulties of conducting field work, quantitative and qualitative analyses were purposefully iterated in an attempt to innovate an interdisciplinary research method capable of examining politically sensitive issues within a tightly controlled field setting characterized by repressed political dissent.

Quantitative data were mostly obtained from publically-available official statistical sources, such as the China (and various provincial) statistical yearbooks from various years, the 2000 population census tabulations, and the China population statistics yearbooks from various years. While the precise accuracy of these official sources is often doubted, the alternative of conducting independent household surveys was impossible given the political situation. However, in defense of these data sources, I have generally found that they corroborate with fieldwork in terms of representing broad structural trends over time. The issue of precise accuracy was therefore not an overwhelming obstacle for the inductive nature of quantitative analysis required for this study.

---

7 In this article, “China” refers to the Peoples’ Republic of China (PRC) and “Tibet” refers to all of the Tibetan areas in China, including the Tibet Autonomous Region (TAR) and the Tibetan areas that are incorporated into the provinces of Qinghai, Gansu, Sichuan, and Yunnan. This larger understanding of Tibet is actually not controversial given that it conforms to administrative definitions in China, which identify Tibetan autonomous areas at various levels of jurisdiction. The TAR is equivalent to a province, whereas Tibetan areas incorporated into the other provinces are designated as either autonomous prefectures (TAPs) or counties (TACs). With the exception of some disagreements in the borderlands of Eastern Tibet, the Chinese administrative definitions are almost identical to the definition of Tibet used by the Tibetan Exile Government and they conform to the areas that Tibetans consider to be Tibet. Most of these highland areas are also clearly differentiated from non-Tibetan lowlands by topography and population density. Notably, the TAR only accounts for just over half of the Tibetan autonomous areas in China and less than half of the total Tibetan population in China. The boundaries of this region were determined by the territory controlled by Lha sa (Lasa) at the time of the PRC invasion in 1950.

The data is nonetheless limited by what has and has not been divulged in publicly available official Chinese sources. Outside of population censuses, these sources do not disaggregate data by ethnicity. Thus some creative extrapolation is often required in order to circumvent the data limitations and to tease out insights from the available data. This includes using the rural data for the TAR, which represents an almost entirely Tibetan experience, as a proxy for the general experience of Tibetans outside the TAR. The rural data of the other Chinese provinces containing Tibetan autonomous areas is overwhelmed by the population weight of non-Tibetans in the non-Tibetan areas of the respective provinces. Using the TAR data to approximate broad trends outside the TAR is arguably a valid approach, at least with respect to rural areas, given strong similarities across Tibetan areas and stark differences between these areas and everywhere else in China in terms of topography, population density, patterns of land-use and livelihood, levels and composition of average rural household incomes, education levels, and health indices. Nonetheless, effort has been made throughout this study to find suitable sub-provincial data for Tibetan areas outside the TAR in order to render this proxy method more rigorous.

Similarly, the qualitative methods of this study were somewhat eclectic given the broad scale and political sensitivity of the issues researched. Formal surveys were not possible and thus the field methods were basically ethnographic in nature. Nonetheless, a wide variety of field sites was sampled, each with much less depth than would be normally accorded by purely ethnographic methods. This approach was taken partly to avoid spending too much time in each community for political reasons, and also partly as a means to trace broader processes of circulation across the regional Tibetan system.

The resultant fieldwork was analyzed along the lines of Grounded Theory. The commonalities or similarities that appeared throughout the fieldwork were emphasized as a means to generate deeper insight into patterns found in the quantitative data and to guide new lines of quantitative (and qualitative) inquiry, up until a point where no new data, whether quantitative or qualitative, substantially altered or challenged the emerging theory. Again, this interdisciplinary systemic approach offers particular scientific value even though it requires some creative eclecticism. While it is true that there are enormous variations across Tibet and even between two valleys, strong commonalities can be nonetheless observed across this cultural and topographic region the size of Western Europe, giving credence to indigenous notions of Tibet that transcend modern political boundaries.

The fieldwork included twelve months spent in Tibet and China between June 2003 and January 2005, and two subsequent one-month visits in December 2005 and September 2007. This was more generally informed by seven years of pre-doctoral field experience living in Tibetan refugee communities in India and Nepal from 1995 to 2001. The fieldwork was conducted in all three of the major

---

Tibetan regions (Dbus gtsang, Khams, and A mdo) and in four of the five Chinese provinces containing Tibetan areas (the TAR, Qinghai, Sichuan, and Gansu). The largest portion of time was concentrated in A mdo/Qinghai due to a range of concerns, from logistics and freedom of movement to research interest. Extensive visits were made to both farming and pastoral areas in Qinghai, Sichuan, and Gansu, including repeated and extended contact within eight rural communities. Limited rural travel was also undertaken in the TAR, although this was restricted due to the heavy controls over the movement of foreign researchers outside Lhasa. Counties visited, along with their respective urban centres, included: Lhasa and Gzhis ka rtse (Rigazö) in the TAR; Xining (zi ling), Xunhua (ya rdzi), Hualong (ba yan), Gcan tsha (Jianzha), Reb gong (Tongren), Sog po (Henan), Chab cha (Gonghe), Mang ra (Guinan), Skye rgu mdo (Yushu), Rta bo, and Dar lag (Dari) in Qinghai; Lanzhou (lan zhu’u), Linxia and Bla brang (Xiahe) in Gansu; Chengdu (khren tu), Ser shul (Shiqu), Sde dge (Dege), Ma ni gang ‘go, Dkar mdzes (Ganzi), Brag ‘go (Luhuo), Rta’u (Daofu), lha sgang (Tagong), Dar rtse mdo (Kangding), and Rnga ba (Aba) in Sichuan; and several short visits to research centres and universities in Beijing. The urban centers were chosen because of their importance as regional loci for local government administration, education, business, off-farm employment, and migration.

Fieldwork entailed informal and unstructured interviews, conversations, focus groups, participant observation, and general living experience within households in several of these settings, in both rural and urban areas. Interviewee selection was determined through snowball sampling; the politicized nature of the research precluded both representative sampling as well as extended ethnographic contacts.

Some interviews were conducted by myself in Tibetan (mostly in Dbus gtsang, but also with A mdo bas and Khams pas who spoke the Lhasa Tibetan dialect). Some were conducted by myself in English (with Tibetans or Chinese who spoke English). About half were conducted with the assistance of either a Tibetan translator (in the case of interviews with A mdo ba or Khams pa Tibetans who only spoke difficult-to-understand dialects) or a Chinese translator (in the case of interviews with Chinese, Muslims, and some educated Tibetans). The exact number of informants is difficult to quantify because in many cases contact was made in very fluid social settings. However, it is possible to enumerate roughly 228 key informants, in terms of contacts that resulted in significant and substantive field insights. This sampling was disproportionately weighted towards more elite

---

10 For instance, I spent one month in Xining living with two Han secondary school teachers, who on many occasions invited me to social events with their colleagues and, on one occasion, brought me to speak at their high school, following which I had the chance to interact with more than a dozen staff and scores of student representatives. Similarly, many of my most informative moments with Tibetan teachers or students were in large social events, often lasting several days. A typical “interview” with farmers or nomads usually involved spending the better part of a day drinking tea and gossiping about the latest news from the Tibetan-Buddhist world, while interjecting a pertinent question for my research only once or twice an hour. While the main host might have remained constant throughout such conversations, many people would usually visit and participate for shorter intervals. As a result, it is difficult to enumerate the exact number of informants interviewed.
informants (including a strong representation of religious elites), particularly local Tibetan, Chinese, or Muslim scholars, who are a wealth of knowledge but are considerably more constrained than foreign researchers in the dissemination of their findings. For the sake of anonymity, more detail will not be disclosed.

**Relative Income Poverty, Productivity, and Relative Asset Wealth**

This section briefly describes the dynamics of rural Tibetan wealth since 1990 as represented in the official Chinese statistical sources, summarized from my more detailed analyses presented elsewhere. There are primarily three sets of data of interest: per capita household income (or the closely related data on expenditure); productivity; and per capita productive fixed assets. In principle, these measures of wealth, relative to the same measures elsewhere in China, should provide some indication of the underlying material conditions affecting relative reservation wages, which is discussed in the next section. However, these three depict contradictory patterns in rural Tibetan wealth relative to the rest of rural China. An attempt to resolve this is made through an analysis of subsistence.

**Rural Household Incomes**

In real terms (that is, according to purchasing power, after discounting for rural consumer price inflation), per capita rural household incomes in the TAR apparently collapsed in 1994 and again in 1997, after which they slowly rose, only surpassing their previous 1992 peak by 2003. In relative terms, they fell to the lowest of all Chinese provinces from 1997 to 2002 and have since remained in the range of the poorest (see Figure 1 below). Moreover, the relative comparison underestimates the relative income poverty of rural Tibetans in the TAR given that the cost of living in the TAR is considerably higher than in other western provinces, implying that the purchasing power of these household incomes in the TAR relative to other western provinces is less than implied by the figure below.

---

11 See Chapters Two and Four in Fischer, *State Growth*.

12 Cost of living data are not publicly available in China. However, it is easy to ascertain from field work that price levels in the TAR are significantly higher than in the rest of Western China. For instance, using the starting fare of a taxi as a very rough barometer, in 2005 this fare was five yuan in Chengdu, six yuan in Xining, and ten yuan in both Beijing and Lhasa.
One surprising result from Figure 1 is the fact that real rural incomes in the TAR were apparently much higher in the early 1990s than in other western provinces and even higher than the national average. This comparison is somewhat misleading given that the data in Figure 1 have been adjusted for price inflation in each province, and price inflation in the TAR was the highest in China during the 1990s. In current prices (that is, prices in the year of measurement), TAR rural incomes only exceeded the national average in 1992, although they were higher than most other western provinces besides Xinjiang (East Turkestan) throughout the 1980s and early 1990s.

Inflation notwithstanding, the relatively high incomes up to the early 1990s reflect the fact that rural Tibetans benefited quite well from the first decade of the reform period compared to other western provinces. The introduction of individual patterns of land-use in the early 1980s combined with other pro-agrarian policies of the early reform period provided an immediate recovery from the debacles of collectivization in the 1970s, although the precise factors that boosted rural

---

13 Rural income data is from National Bureau of Statistics, China Statistical Yearbook 2005 (Beijing: China Statistical Press, 2005), Table 10-21, and equivalent tables in previous yearbooks (1993-2004). Rural consumer price index (CPI) data is from China Statistical Yearbook 2005: Table 9-5, and equivalent tables in previous yearbooks (1991-2004). The figure starts in 1990 because this is the first year reported for the TAR CPI.

14 Calculating from China Statistical Yearbook (1991-2005), the cumulative rural CPI from 1990 to 2004 (1990=100) was 203 for all China, 221 for Qinghai, 236 for Gansu, 224 for Sichuan, and 254 for the TAR.

15 The reported surge in official TAR incomes in the early 1990s might also reflect some data manipulation, given the political sensitivity of the region following the uprisings in Lhasa in 1989. TAR rural incomes were not so high relative to other provinces in the 1980s.

16 For some description on how the late introduction of communes in the early 1970s followed by failed attempts at large-scale crop diversification led to ecological disaster and widespread hunger in
Tibetan wealth are difficult to decipher from the data of that period and they will not be analyzed here. Nonetheless, Goldstein et al.\textsuperscript{17} found that 94 percent of the farming households in the TAR that they surveyed in the late 1990s felt their livelihood had improved since de-collectivization. Figure 1 seems to indicate that the improvements mostly took place in the 1980s.

In contrast, the rural economic stagnation in the TAR during the 1990s that appears in these official income statistics was exceptional among all the Chinese provinces. If accurate, it reflects that rural Tibet was particularly vulnerable to inflation and structural economic transformations over this period. The statistical appearance of stagnation may also be in part related to measurement issues, such as changing methods of measuring subsistence,\textsuperscript{18} or new sources of income that might have been poorly recorded in these data, such as the recent and largely unrecorded boom in caterpillar fungus trade.\textsuperscript{19} Several serious accounting inconsistencies also underlie the sudden sharp income increases in 2003 and 2004, which might reflect data manipulation or the fact that the surveying authorities had difficulty incorporating new sources of income into existing categories.\textsuperscript{20} The latter explanation is more likely, given that these income increases were sustained in 2005 and 2006, and they corroborate with the general experience of agriculture in these years (that is, good harvests combined with improved terms of trade for agricultural commodities) and with the field insights of several scholars.\textsuperscript{21}

\textsuperscript{17} Goldstein et al., “Development and Change,” 764.

\textsuperscript{18} See Fischer, \textit{State Growth}, Chapters One and Four.


\textsuperscript{20} From Tibet Bureau of Statistics, \textit{Tibet Statistical Yearbook 2005} (Beijing: China Statistical Press, 2005), Table 8-14, we can see that the sharp boost to official TAR per capita rural incomes in 2003 and 2004 was due to a sudden increase in labor remuneration in 2003 (sustained in 2004) and moderate increases in “transfer income and property income.” In contrast, overall income from household business operations (farming, herding and various minor activities) fell in real terms. The sharp increase in labor remuneration in 2003 might have been due to various construction projects, although labor remuneration completely collapsed in the category of “Enterprises,” which is where we would expect remuneration from projects run by state-owned enterprises to be reported. Rather, almost all of the increase in labor remuneration derives from the unidentified category of “Other Units.” Also, comparing with Table 8-15, per capita rural living expenditure grew much slower than income. If income increases were due to the recent boom in the caterpillar fungus trade, they should have been reported as part of household business income and they should have been reflected in the expenditure data.

\textsuperscript{21} For instance, in discussions with Melvyn Goldstein from 2005 to 2008 on his research in the TAR, he noted sharp improvements in the rural economies of both the farming and nomadic areas he was studying. Also see Melvyn C. Goldstein, Geoff Childs, and Puchung Wangdui, “‘Going for Income’ in Village Tibet: A Longitudinal Analysis of Change and Adaptation, 1997–2007,” \textit{Asian Survey} 48, no. 3 (2008), 514-34.
2004 were still considerably lower than those in Sichuan, the source of the majority of Han Chinese migrants to most Tibetan areas.\textsuperscript{22}

Beyond these averages, rural poverty rates in the TAR were among the highest in China up to 1999, although they were also falling up to this year.\textsuperscript{23} Since then we have no publicly available income distribution data for the TAR. However, comparison of provincial rural rates is problematic in China given the absence of province-specific rural poverty lines. The fact that the cost of living is much higher in the TAR than in other western provinces implies that its rural poverty rates measured by a single national poverty line are underestimated relative to other western provinces.

**Productivity**

It is important to note that the stagnation of Tibetan rural incomes over the 1990s cannot be explained by differences in agricultural productivity with the rest of western China. In fact, as indicated in Table 1 below, productivity per hectare in the TAR in 2004 was among the highest in western China and higher than the national average. The only western provinces that were consistently more productive than the TAR were Xinjiang, known for its intensive agro industry, and the Chengdu basin of Sichuan, known as the garden of China with three harvests a year. If these data are accurate, they represent impressive productivity, particularly that the TAR yields are achieved within a short and harsh growing season (both in crops and grasslands).\textsuperscript{24}

\textsuperscript{22} According to the 2000 population census, 63 percent of the population in the TAR with their place of household registration based outside the TAR was from Sichuan, or 68,496 people out of a total of 108,669. See Department of Population, Social, Science and Technology Statistics, National Bureau of Statistics, *Tabulation on the 2000 Population Census of Tibet* (Beijing: China Statistical Press, 2002), Table 7-2. Alternatively, lower shares for Sichuan were measured by Ma Rong and Tanzen Lhundup. In their survey of 1470 migrants in Lhasa in September-October 2005, 30 percent of respondents were from Sichuan and 24 percent from Gansu, including both Tibetan and Han ( Ma Rong and Tanzen Lhundup, “Temporary Migrants in Lhasa in 2005,” *Journal of the International Association of Tibetan Studies*, no. 4 (December 2008), 16-17), http://www.thlib.org/?tid=T5561. However, it is not clear to what degree their survey was representative of the broader migrant population.

\textsuperscript{23} According to the national absolute poverty line calculated by the National Bureau of Statistics in the late 1990s, the rural poverty rate in 1999 was 24.5 percent in the TAR, 19.4 percent in Qinghai, and 9.1 percent in China. These calculations are explained in more detail in Fischer, *State Growth*, 96-110.

\textsuperscript{24} I interviewed two agronomists working in the TAR, one Western and one Tibetan, during fieldwork in 2004, who confirmed these levels of productivity. Both noted that that farmland in the TAR is very productive if irrigated. Given that farmland tends to be concentrated in river valleys, this potential can be realized much more easily than in the semi-arid conditions of the loess plateau that covers large parts of northern China, where water is very scarce.
Table 1: Agricultural Productivity in Selected Provinces and National Average, 2004

<table>
<thead>
<tr>
<th></th>
<th>TAR</th>
<th>Xinjiang</th>
<th>Sichuan</th>
<th>Qinghai</th>
<th>Gansu</th>
<th>Yunnan</th>
<th>Guizhou</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Per Hectare Yields (kg)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereals</td>
<td>5300</td>
<td>5863</td>
<td>5420</td>
<td>3559</td>
<td>3409</td>
<td>4133</td>
<td>4673</td>
<td>5187</td>
</tr>
<tr>
<td>Rapeseed</td>
<td>2217</td>
<td>1802</td>
<td>2026</td>
<td>1792</td>
<td>1602</td>
<td>1774</td>
<td>1533</td>
<td>1813</td>
</tr>
</tbody>
</table>

| **Per Capita Output (kg)** |      |          |         |         |       |        |         |       |
| Grain              | 362  | 409      | 361     | 165     | 309   | 343    | 296     | 353   |
| Oil Seeds          | 20   | 23       | 26      | 54      | 19    | 8      | 21      | 24    |
| Meat               | 77   | 55       | 60      | 45      | 27    | 59     | 35      | 45    |
| Milk               | 75   | 68       | 6       | 42      | 10    | 6      | 1       | 17    |

| **Output Per Agricultural Laborer (kg)** |      |          |         |         |       |        |         |       |
| Grain         | 1132 | 2377     | 1316    | 664     | 1058  | 892    | 881     | 1518  |
| Oil Seeds     | 64   | 133      | 95      | 217     | 64    | 20     | 63      | 99    |
| Meat          | 246  | 321      | 220     | 181     | 93    | 152    | 105     | 187   |
| Milk          | 239  | 398      | 22      | 171     | 34    | 16     | 3       | 73    |

The data on output per capita or per agricultural worker show similar comparative patterns. In terms of per capita output of grain, the TAR is again ahead of the national average. However, in terms of output of grain per agricultural worker, the TAR falls behind the national average. It is not clear why this might be the case, although it might reflect the fact that a greater proportion of the rural labor force works in agriculture than in China, thus resulting in higher labor-intensity per unit of output. We would need to know more about the way these data are constructed in order to evaluate this further. Similarly, how these principles apply to pastoralism in Tibet is difficult to assess as pastoralism is not easily comparable with other forms of animal husbandry in China. For the sake of inter-regional productivity comparisons, we must therefore restrict ourselves to the case of farming.

This productivity performance of the TAR relative to the Chinese average has been consistent since at least the 1990s, increasing in tandem with national agricultural productivity. In other words, farmers (and, presumably, nomads) in the TAR have been at least as successful as the predominantly Han Chinese provinces in bringing about increases in agricultural productivity, even if their

---


26 For instance, see my results for a similar comparison based on data from 1998 in Fischer, *Poverty by Design*, 20-23.
activities have remained largely subsistence-based with minimal state assistance.\textsuperscript{27} Therefore, the stagnation of per capita rural incomes in the TAR, as analyzed above, has not necessarily been related to deficiencies in productivity.

Rather, stagnation was more likely related to the collapse in the prices of the main commodities produced by Tibetans (wool and grains) throughout the 1990s, alongside a shortage of rural employment opportunities outside farming and herding, and faster rural population growth than elsewhere in China.\textsuperscript{28} In essence, collapsing prices have been compensated in most other regions of China by a rise in off-farm rural employment, which has been one of the strongest factors driving income growth (and inequality) in rural incomes.\textsuperscript{29} Up to the early 2000s, the fate of rural Tibetans was disproportionately determined by the fate of farming and herding, relative to other rural populations in China. This leads logically to the policy conclusion that increased wage employment would be beneficial.

**Productive fixed assets**

The relative income poverty of Tibetans co-exists with relative asset wealth. Rural households in the TAR are in fact the most asset-intensive in China (see Figure 2 below). The next most asset intensive province is Ningxia (not shown), followed closely by Xinjiang, Inner Mongolia, and Qinghai, all provinces where pastoralism is prevalent. Most of these productive fixed assets are based in agriculture, as elsewhere in China. In the pastoral cases, this obviously includes a large component of livestock, as evidenced in the first two rows of Table 2 below. Notably, most land-use in the Tibetan areas is either pastoral or mixed pastoral-farming, and livestock feature prominently even within pure farming areas.\textsuperscript{30}

\textsuperscript{27} Agricultural extension programmes have nonetheless featured more prominently since the mid-1990s. Infrastructure improvements would have also supported productivity increases.

\textsuperscript{28} These factors are discussed in detail in Fischer, “Population Invasion”; and Fischer, *State Growth*, Chapters Four and Five.

\textsuperscript{29} Most income decomposition analyses in China point to this clearly. For instance, see Azizur Rahman Khan and Carl Riskin, *Inequality and Poverty in China in the Age of Globalization* (Oxford: Oxford University Press, 2001), 30. Similar results were reported for the TAR in Goldstein et al., “Development and Change.”

However, Tibetan households also have a much higher value of non-livestock productive fixed assets, as shown in the last six rows of Table 2. There were 3.8 times the number of motorized vehicles per one hundred households in the TAR than in China on average in 2004; 1.6 times the number of large and medium tractors; and twice the number of mini or walking tractors. The per household number of carts with rubber tires was the same as the national average, while the number of motorized threshing machines and pumps was less, reflecting the fact that these items are more related to intensive farming. Conversely, the higher value and number of transport-related productive fixed assets is obviously related to the much greater distances that pastoralists and even farmers are required to travel in the Tibetan areas.

Table 2: Major Productive Fixed Assets Per One Hundred Rural Households, End of 2004 (unit)

<table>
<thead>
<tr>
<th></th>
<th>TAR</th>
<th>Xinjiang</th>
<th>Qinghai</th>
<th>Inner Mongolia</th>
<th>Yunnan</th>
<th>Gansu</th>
<th>Sichuan</th>
<th>Guizhou</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft Animals</td>
<td>269.0</td>
<td>97.0</td>
<td>94.0</td>
<td>81.0</td>
<td>65.0</td>
<td>79.0</td>
<td>31.0</td>
<td>76.0</td>
<td>35.0</td>
</tr>
<tr>
<td>Commodity Animals</td>
<td>503.0</td>
<td>424.0</td>
<td>119.0</td>
<td>263.0</td>
<td>49.0</td>
<td>67.0</td>
<td>46.0</td>
<td>27.0</td>
<td>52.0</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>5.4</td>
<td>1.7</td>
<td>4.0</td>
<td>2.1</td>
<td>1.3</td>
<td>1.2</td>
<td>0.9</td>
<td>1.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Large and Medium Tractors</td>
<td>3.5</td>
<td>5.7</td>
<td>1.2</td>
<td>2.8</td>
<td>0.7</td>
<td>2.9</td>
<td>0.5</td>
<td>0.6</td>
<td>2.2</td>
</tr>
</tbody>
</table>

31 China Statistical Yearbook 2005: Table 13-12.
Older yearbooks also show that about half of the original value of productive fixed assets per rural household in the TAR was in the form of non-livestock productive fixed assets such as industrial machinery or buildings for productive purposes. Similar to productivity, the ratios with other provinces or the national average have been more or less consistent between 1998 and 2004. This seems to indicate that rural Tibetan households have been accumulating productive assets at a similar rate as elsewhere in rural China.

It could be disputed that even at this much higher asset-intensity, the numbers of assets represented in Table 2 are still quite poor in absolute terms, that is, 2.7 draught animals and five commodity animals per Tibetan household. However, it should be noted that these represent provincial averages. In the TAR, this includes a mix of pure farming, agro-pastoral and pure pastoral regions. Moreover, even though pastoral households account for most of the land use in the TAR, they only account for a minority of households, given that pure farming areas are much more densely populated. Thus, the actual asset intensity of pure pastoral households is higher than represented in Table 2, while that of pure farming households would be somewhat lower, although probably still higher than the national norm given their larger landholdings, as discussed below.

It could be further disputed that these asset measures do not accurately reflect comparative asset-intensity given that the most important asset for farming households is land, which is not included in these data. Therefore, the livestock and related asset intensity of Tibetan pastoral households could be off-set by the value of farmland elsewhere in China (and in the pure farming Tibetan areas). However, this line of argument overlooks the fact that rangeland is also highly valued by pastoralists given its direct relationship to the potential size and quality of a herd. Indeed, both rangeland conflicts and the emergence of pasture rental markets are sure signs that pastures are valued. The fact that the per-unit value

<table>
<thead>
<tr>
<th>Mini Walking Tractors</th>
<th>37.9</th>
<th>25.0</th>
<th>55.0</th>
<th>45.4</th>
<th>7.2</th>
<th>28.9</th>
<th>1.0</th>
<th>0.7</th>
<th>18.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorized Threshing Machine</td>
<td>4.8</td>
<td>2.1</td>
<td>3.4</td>
<td>4.8</td>
<td>5.3</td>
<td>1.6</td>
<td>14.4</td>
<td>5.0</td>
<td>10.1</td>
</tr>
<tr>
<td>Carts with Rubber Tires</td>
<td>12.5</td>
<td>53.2</td>
<td>20.0</td>
<td>38.2</td>
<td>7.9</td>
<td>18.7</td>
<td>1.4</td>
<td>3.3</td>
<td>12.9</td>
</tr>
<tr>
<td>Pumps</td>
<td>2.3</td>
<td>2.7</td>
<td>1.0</td>
<td>36.7</td>
<td>3.9</td>
<td>6.9</td>
<td>26.5</td>
<td>5.1</td>
<td>22.1</td>
</tr>
</tbody>
</table>

33 For instance, see China Statistical Yearbook 1999: Table 12-11. Many of the buildings counted probably included items such as livestock shelters.

34 In discussions with Melvyn Goldstein, it seems that there is no reliable population estimate of the number of pure pastoralists in the TAR, although they appear to account for less than half of the rural population.

35 On rangeland conflicts, see Fernanda Pirie, “Feuding, Mediation and the Negotiation of Authority among the Nomads of Eastern Tibet,” Max Plank Institute for Social Anthropology Working Paper 72
of rangeland might be lower than farmland, due to a lower per-unit intensity of use, is compensated by the fact that pastoral households have much more land than farming households. Therefore, even if land values were included in the fixed asset data, it is probable that the TAR would again be ahead of the national average, even within this category, as well as pastoral areas vis-à-vis farming areas within the TAR itself.

These variations in landholding sizes between the Tibetan areas across the plateau and the lowland areas of China Proper represent broad differences in population density relative to land availability. It is useful to recall that the population density of the TAR was about two people per square kilometer in 2000, and about seven for Qinghai (including the densely populated northeast corner of the province, and thus much less in the Tibetan areas of Qinghai), whereas it was 132 for China and 172 for Sichuan. If we remove the western half of Sichuan that is composed of Tibetan autonomous areas, we are left with a population density of 344 people per square kilometer in eastern Sichuan, versus about nine in the Tibetan areas of Sichuan. Obviously, arable land is much more limited in these Tibetan areas; it is roughly estimated that only 2 percent of the land area in the TAR is arable, although about 40 percent is used as pastures (these proportions would be higher in the Tibetan areas of Sichuan). Nonetheless, the huge disparity in population density leaves the Tibetan highlands with much more land per person than the lowlands of China.

An example from my fieldwork in Xunhua County in Qinghai illustrates these differences in typical holdings of farmland. In 2004, landholdings in the Tibetan hinterlands of Xunhua County averaged about two to three mu per person, whereas landholdings averaged about half a mu per person in the lowland Salar Muslim areas. I found these average farmland holdings of Xunhua Tibetans to be very representative of other farming areas I visited throughout Tibet, such as in the pure farming areas of Gcan tsha, Reb gong, Chab cha, or Mang ra Counties in Qinghai; Dkar mdzes, Brag ’go, or Rta’u Counties in Sichuan; or Lha sa, Lho kha, and Gzhis ka rtse Counties in the TAR. In all cases, land holdings typically ranged from two to four mu per person. Similarly, outside the Tibetan areas, landholdings in the Han or Muslim farming areas of western or central China tend to resemble those of the Salar in Xunhua. While the landholding sizes in the Tibetan farming areas are not sufficient to generate substantial surplus wealth, they are generally sufficient


Interview with two officials from the Xunhua agricultural department, Xunhua County, June 2004. Note that fifteen mu = six acres = one hectare.
to cover subsistence needs, as discussed below, whereas those of the Salar or other Muslim and Han areas are not.

![Map 1: A map of Qinghai, with a detail of Haidong Prefecture. (Map: THL/Quentin Devers)](image)

The mixed farming-pastoral Tibetan zones also have rangeland holdings in addition to the household farmland holdings, and household rangeland holdings in pure pastoral areas can be considerable. In Sog po County in Qinghai, a fairly densely populated pastoral area that I visited in 2003, typical rangeland holdings were around five hundred to one thousand mu per household, or, depending on the size of the household, more than one hundred mu per person. Some of the pastoral areas that I visited in 2004 in Dkar mdzes Prefecture in Sichuan have denser populations, resulting in greater pressure on rangeland holdings and smaller herds. Susan Costello, a scholar with extensive field experience in Mgo log, reported to me that the landholdings of nomadic households that she studied in Mgo log ranged from 1800 to 2400 mu, which would also be similar to landholdings in Yushu, given that both prefectures in Qinghai have abundant land, albeit at higher altitudes and therefore slower growth of pastures. I was not able to visit any pastoral areas in the TAR, although discussions with several western scholars working in pastoral areas of Western and Southern TAR confirm these general observations from elsewhere in Tibet. Given the extent of these differences in landholding sizes between farming and pastoral areas in Tibet, it is very plausible that the higher

---

38 Interview with two county officials, Sog po County, July 2003.
39 Personal communication, 3 February 2006.
fixed-asset values would correlate with higher land asset values if the latter were measured.

Finally, it could be further argued that these differences in asset values simply reflect different agricultural systems, with pastoral systems requiring more fixed and land assets in order to achieve a basic level of subsistence and insurance. For instance, one might find drought stricken Somali pastoralists possessing more fixed assets than farmers in more productive agricultural areas around them. Moreover, assets play an important risk insurance role and thus cannot necessarily be treated in the same way as an income stream. Indeed, one of the rationales for maintaining large herds is to insure against environmental hazards such as harsh winters; a large herd increases the chances of surviving such hazards with a herd size that can still maintain subsistence. This in turn helps to explain why pastoralists tend to be risk-averse and thrifty with regard to asset management, just as poor farmers tend to be risk-averse with regard to crop cultivation.40

These arguments notwithstanding, there is a general consensus in Tibet among local people and Tibetan and western scholars that nomadic households tend to be wealthier than farming households on average, particularly in terms of disposable wealth or durable consumer goods.41 This was definitely the case in previous periods of history and it still appears to hold now. However, this is not reflected in the household income statistics, in part due to the fact that pastoral savings (e.g., an increase in yak herd size) are recorded as increases in productive fixed assets, and are thereby not reflected in the data on pastoral household incomes, whereas savings of grain output are calculated as part of farming household incomes. Therefore, the asset data need to be combined with the income data for an overall evaluation of comparative levels of wealth across regions or different agricultural systems.

However, given that it is unclear how assets and income should be combined, in what proportions and under what circumstances, there is considerable ambiguity in comparative wealth assessments. For instance, in certain cases there may even be an inverse relationship between income and assets. A remote nomadic household might appear poor in terms of income (and in terms of education and health) yet possess substantial livestock assets, enough to offer considerable subsistence consumption (even before considering the windfall opportunities provided by a lush supply of caterpillar fungus, as is the case in many remote high altitude nomadic areas). In contrast, a nomadic household located closer to a populated


41 For instance, this was the opinion of Melvyn Goldstein, expressed to me in discussions in 2005 and 2006, based on his recent fieldwork in farming and nomadic areas of western Tibet.
area might have much more circulating income due to their integration into the “commodity economy,” even while their asset base is depleted due to shortage of quality pastures or stronger state enforcement of livestock limits.\textsuperscript{42} Furthermore, asset depletion might be reflected as income growth, such as when a herder is hard pressed for cash in one year and sells off a larger part of his herd than would normally be viable.\textsuperscript{43} In these cases, an increase in income wealth may in fact represent considerable subsistence impoverishment.\textsuperscript{44}

All of these considerations nonetheless hint towards the fact that there is considerable wealth generated and stored in subsistence-based rural economies that is often poorly captured by conventional household income measures. As a result, Tibetan rural areas and, in particular, Tibetan nomadic areas may be considerably wealthier than the official income data suggest. Moreover, these conventional measures may be poorly conceived for capturing the wealth dimensions of transition from more subsistence to more monetized or commoditized modes of wealth circulation; smooth monotonic increases in real disposable incomes (that is, after tax and after adjusting to inflation) may not necessarily reflect actual changes in overall wealth. In other words, rising incomes might hide the erosion of asset-based subsistence through population and economic pressures, or through government policies that undermine this asset base, such as resettlement or land reforestation programs, or the imposition of livestock limits.

**Subsistence as Wealth**

One way around these measurement problems is through an evaluation of subsistence. In deference to Polly Hill,\textsuperscript{45} I use the term “subsistence” with caution (for reasons discussed later), although I have generally found that rural Tibetans do operate within a subsistence-surplus mode. In support of this, Goldstein et al. estimated in their survey of thirteen farming villages in the TAR that 77 percent of households produced enough grain for their consumption needs or a surplus.\textsuperscript{46}

\textsuperscript{42} Similar observations were also made by Rigdrol (single name), a Tibetan NGO staff from Mgo log, in a presentation at the 11th IATS conference in Bonn, August 2006. He also noted qualitative aspects, such as the fact that nomad herding in areas under ecological or population pressure also tend to have poorer quality herds, such as thinner animals and poorer quality wool.

\textsuperscript{43} These examples were also mentioned by Rigdrol.

\textsuperscript{44} For example, during fieldwork in Brag 'go County, Dkar mdzes Prefecture, Sichuan, which is a mixed farming-nomadic region that is fairly densely populated (compared to more pure pastoral areas), one family (or mobile household) I interviewed in August 2004 had about twenty-five to thirty animals (numbers cited were not precise), including four to five mdzo (a cross between a yak and a cow) and ten to fifteen yak. This family did not characterize themselves as particularly poor relative to the nomadic norm in this region. Nonetheless, their livestock holdings were less than the official livestock poverty line discussed in the following section.


\textsuperscript{46} Goldstein et al., “Development and Change,” 767. However, in Goldstein et al., “‘Going for Income,’” they also argue that there has been a very rapid shift between 1997 and 2007 in the villages they surveyed in Central Tibet from a predominantly subsistence agricultural economy to a new mixed economy in which non-farm income plays a dominant role.
Similarly, in official statistics, only 57 percent of total per capita rural household expenditure was derived from cash in the TAR in 2004, which was much lower than most other Chinese provinces. Most of the difference was from food.\textsuperscript{47}

Accordingly, Goldstein et al. attempted to measure poverty according to subsistence-based measures. They estimated that 14 percent of households in their survey of thirteen farming villages in the TAR during the late 1990s were poor on the basis of not having sufficient grain either from their own fields or from wages, and had to borrow or get welfare to meet their needs.\textsuperscript{48} This rate lies between the official income poverty rates for the TAR in 1999 measured by the official (9.1\%) and absolute (24.5\%) poverty lines.\textsuperscript{49} While these cited surveys of Goldstein et al. did not cover any pastoral areas, the same team conducted longitudinal research on a nomadic area of Western Tibet, which also used a rough estimate of basic subsistence requirements.\textsuperscript{50} They used the official county poverty line of thirty sheep equivalents per person (one yak = four sheep; one horse = six sheep), which appears to be a standard throughout Tibet (although sometimes heads of animals are calculated without considering sheep equivalents). According to the sheep-equivalent line, they found that the proportion of poor households in their small nomadic sample rose from about 5 percent in 1986 to 20 percent in 2005, while the proportions of middle and rich households fell. Rising poverty rates were not due to falling average incomes (average incomes rose). Rather, they were due to sharp increases in inequality, particularly since the late 1990s, and the emergence of new poor and rich groups of nomads (in terms of sheep equivalents). However, Goldstein also explained that, underlying these changes, the standard of living generally improved among these poor due to a variety of development and community welfare interventions.

One should be cautious in generalizing from their small sample or comparing their results across regions. To overcome these limitations, I propose the concept of absolute and relative “subsistence capacity” as a means to evaluate relative levels of wealth measured in terms of an ability to subsist on household production. Absolute subsistence capacity refers to the ability of a household to produce a surplus above the subsistence needs required to reproduce itself economically. This meaning is essentially synonymous with food security at a household or community level.\textsuperscript{51} Relative subsistence capacity refers to this absolute subsistence capacity in comparison to other households or communities that have an impact on labor supply and wage rates within a regional economic system.

---

\textsuperscript{47} Calculated from \textit{China Statistical Yearbook 2005}: Tables 10-26 and 10-27.

\textsuperscript{48} Goldstein et al., “Development and Change,” 769.

\textsuperscript{49} Fischer, \textit{State Growth}, 107.

\textsuperscript{50} Findings presented by Melvyn Goldstein at two conferences in 2006 (Bonn, August 2006; and Harvard, December 2006), and personal communications from November 2005 to August 2007.

\textsuperscript{51} A scattering of references to subsistence capacity can be found in the environmental literature although only as a synonym for carrying capacity, not in the sense used here.
The relative comparison made here refers to inter-regional comparisons. It does not necessarily fall into the trap of homogenizing the “peasantry” within each region due to the exceptional transitory circumstances of land tenure in China in the 1980s and 1990s. As described previously, variations in landholding sizes between Tibet and China Proper broadly represent differences in population density relative to land availability. Within each region, the individual household responsibility system has led to a uniformity of landholding size at county or township levels that is exceptional in the developing world. Inequality in land assets at the local level is thus largely driven by differences in land quality rather than size. This situation does seem to be changing rapidly, as noted above with respect to rapidly rising inequality since the late 1990s. It therefore appears to be an exceptional transitory outcome in the move from socialist to market forms of rural economic organization during the first twenty years of the reform period. These exceptional characteristics of land tenure in China and Tibet offer a window of comparative insight into the underlying material factors conditioning labor processes across these regions. In most other situations in the developing world, these factors are much harder to decipher given that large intra-community inequalities tend to dominate inter-regional differences.

If we focus on the case of pure farming areas, the relative ability of the average Tibetan household to subsist on household production becomes quite clear. For instance, abstracting from supplementary foods, it is generally considered that a person needs approximately one hundred and eighty kilograms of staple grains to subsist per year. Depending on the quality of farmland, Tibetan farmers typically produce anywhere from one hundred to three hundred kilograms of grain per mu per year (one crop, mostly barley). With a typical range of two to four mu per

---


53 For instance, to continue with the argument of Hill, *Development Economics*, she offers the example of a village she studied in northern Nigeria. Out of 171 farming households, 5 percent were landless, 23 percent cultivated two acres of land or less, 6 percent cultivated twenty acres or more, the second largest holding was thirty acres and the largest was fifty-six acres. Given this dispersion, “it is hardly relevant that the average holding was 6½ acres” (p. 74). In a village of 275 households studied by J. Harriss in Tamil Nadu, India, 44 percent of households were landless, 18 percent of landholders owned no more than one and a half acres, 5 percent of householders owned fifteen acres or more, and only 1 percent owned more than thirty acres (p. 76). Notably, such degrees of intra-community landholding inequality, which Hill argues are typical to most rural areas in the developing world, are simply not observed in Tibet or China since de-collectivization.

54 Interview, director of the local TAR office of the Swiss Red Cross, Gzhis ka rtse, November 2004 and confirmed by a senior Tibetan official from the Tibetan Academy of Agriculture and Animal Husbandry Sciences (TAAAS), interviewed in Lhasa in November 2004.

55 Typically, most farmers that I interviewed in Qinghai or Sichuan estimated their yields at around one hundred and fifty to two hundred kilograms per mu. In one farming area of Qinghai where the soil quality was poor, yields were about one hundred to one hundred and twenty kilograms per mu. The Tibetan TAAAS official mentioned in the footnote above told me that farmland in the river valleys in Lhasa, Lho kha, and Gzhis ka rtse Prefectures in the TAR can yield around two hundred and fifty kilograms per mu, or even up to four hundred kilograms with hybrid grains. Outside these river valleys, yields are more in the range of one hundred to one hundred and fifty kilograms per mu.
person, yields would therefore range from two hundred kilograms to 1200 kilograms per person. For the sake of simplicity, a conservative yield of one hundred and fifty kilograms per mu on three mu of average quality land per person yields four hundred and fifty kilograms of barley per person per year.\textsuperscript{56} In this typical case, the household produces a surplus of about 270 kilograms of grain per person above the subsistence grain needs, which is then sold, bartered with pastoralists for meat and butter, offered to monasteries, stored, or used for making barley wine.

In comparison, consider the typical Salar rural household in Xunhua. Average per mu yields are higher than in the Tibetan highlands due to proximity to the Yellow River, although they are limited by land degradation and urbanization. An estimate of three hundred kilograms of grain per mu on half a mu per person yields only one hundred and fifty kilograms per person per year, that is, less than the subsistence requirement.\textsuperscript{57} In order to meet subsistence food needs, farming households in Xunhua have no choice but to seek work outside household agriculture. Notably, this comparison is between pure farming areas, thereby overcoming the argument (as discussed above) that these differences merely represent different production systems (i.e. pastoral versus farming).

In both cases, off-farm labor is sought for a variety of compulsions (that is, to pay for shortfalls of subsistence, or to pay for education and health fees) and incentives (that is, the desire to consume beyond subsistence needs or to accumulate wealth). However, the difference between a typical Salar and a typical Tibetan household in Xunhua is that the former is compelled to seek off-farm work in order to survive at subsistence, whereas the latter is not. The typical Tibetan enters the search for work due partly to the need or desire for cash income, but s/he is not compelled to do so from the point of view of basic subsistence. From the point of view of subsistence, s/he is entering the labor market with a greater degree of freedom and security relative to the typical Salar (or Hui or Han) farming household. This degree of freedom, achieved by reaching a basic threshold of absolute subsistence, constitutes a subjective premium for the opportunity costs of labor rooted in such subsistence and can serve to support cultural or other preferences.

\textsuperscript{56} Using one hundred and fifty kilograms per mu as a measure, this leads to a per hectare yield of less than half of that cited in Table 1, that is, 2250 kilograms. I am not aware of the official method of calculating the latter yields, although it possibly derives from a survey bias towards the higher yielding pure farming river valleys in the TAR and against the mixed farming-pastoral regions where I was doing most of my fieldwork. Given the often noted official tendency to over-report yields, the bias is probably consistent across China. Alternatively, the per capita yields that I have estimated above, on the basis of my fieldwork, are more consistent with the official per capita yields reported in Table 1.

\textsuperscript{57} This yield estimate was reported to me by the country officials noted above. Most of the Han and Muslim areas in the Northwest are not nearly as well endowed in terms of water supply and land degradation is a serious and escalating problem. On the other hand, farm yields in Sichuan are probably similar to those in Xunhua.
Relative Subsistence Capacity and Relative Wages

Subsistence capacity in turn can be seen to set wage expectations. According to the classic insight of W. Arthur Lewis, this is because subsistence production is the foundation from which alternative labor decisions are made by rural households. Abstracting from cultural preferences, subsistence wealth is thereby key in determining the reservation wage rate required to draw farmers or herders out of subsistence “peasant” production (as Lewis conceived it) and into wage labor. From a methodological point view, the problem is that such subsistence wealth is difficult if not impossible to value in monetary terms, particularly when it provides the material basis for a degree of freedom, as discussed above. Thus subsistence capacity cannot be simply approximated by the market value of net output or in-kind consumption. This is not to say that, because these subsistence considerations cannot be measured, they are irrational or merely cultural. Rather, these material albeit subjective considerations are very salient in influencing wage and work expectations in both “traditional” and “modern” or “capitalist” sectors (to use the terminology of Lewis). Accordingly, relative subsistence capacities can be seen to influence relative wage expectations even though this may not be reflected in income statistics.

In this light, a disjuncture can be seen between the reservation wages of the average Tibetan and the actual wages on offer in low-wage employment in the Tibetan areas. The former are determined locally on the basis of subsistence capacity and subjective valuations of freedom. The latter are determined externally, on the basis of similar considerations elsewhere in western and central China where most of non-Tibetan labor emigration originates. The openness of the Tibetan economy and its tiny size with respect to the rest of China effectively results in the inability of Tibetan expectations to influence actual wages. As a result, local wages are set lower than local rural wage expectations and without relation to local capacities.

This helps to explain the resistance of many rural Tibetans to enter into low-wage employment, as discussed in the next section, precisely because, abstracting from other important factors such as cultural preferences, wages in such employment are set below a level that would be required to attract them out of subsistence production activities. The fact that nomads are generally considered to be wealthier than farmers in the Tibetan areas offers an additional explanation for why Tibetan

---


59 Lewis did not express his theory in exactly these terms; subsistence capacity in this sense essentially describes Lewis’ focus on labor productivity in staple foods constrained by supply of land. I have combined my terminology of subsistence capacity with the modern economic concept of reservation wages, but the essence is the same.

60 In essence, this was the dilemma faced by classical economists, who Lewis drew from for his model and that modern neoclassical economics more or less ignores; if value or wages are set by some non-market material condition in the economy or society, then disjunctures can potentially arise that market mediation is simply unable to resolve.
nomads tend to be much more resistant towards manual wage labor than Tibetan farmers, not only in terms of reservation wages but also in terms of types of work. Resistance is further supported by the fact that the average rural Tibetan is not compelled to seek wage labor in order to meet basic absolute subsistence, and this relative freedom is additionally valued for the dignity that it confers.

This is not to say that only these material factors contribute to such work expectations. They obviously function in combination with inherited cultural norms of what constitutes dignified work. However, subsistence capacity can be seen as a conditioning material factor in the formation of these values overtime, such as in the development of a “working class” attitude among workers in nineteenth-century England following their dispossession of land assets through the enclosure movements, as analyzed by various classic authors such Marx, Polanyi, and others.

Employment and Rural Livelihood Strategies

Rural Tibetans are currently undergoing one of the most rapid, albeit latest moves out of agriculture witnessed during the reform period in China. Subsistence capacity nonetheless sheds light on some of the material aspects that appear to be conditioning Tibetan attitudes towards off-farm employment within this transition. This section offers some observations of these attitudes.

Employment and Wage Expectations

At the risk of making a gross generalization, Tibetan farmers and nomads are not overly inclined to engage in long-term, low-wage employment and generally have higher wage expectations than Han or Muslim migrants of a similar skill level. Moreover, when they do engage in wage employment, they tend to be selective about their employment options. Even in farming areas, where wage employment is more actively sought than in pastoral areas, targeted occupations tend to be in the middle to upper strata of the local labor hierarchy, such as drivers, carpenters, teachers or officials, that is, those that do not offend notions of dignity and/or that bear status. These attitudes contrast with their apparent income poverty, their very poor education levels (among the worst in China), and hence the obvious need for low-skilled off-farm employment in the Tibetan areas.

---


62 My presentation at the 11th IATS conference in Bonn, August 2006, generated much discussion on these points, particularly from Melvyn Goldstein and Geoff Childs, both of whom had recently returned from rural farming areas in the TAR and remarked on the prevalence of job-seeking among farmers. However, on further discussion, Geoff Childs agreed that such job-seeking tended to be targeted towards middle-rung positions in the employment hierarchy, in work that would tend to enhance status in the rural community, such as carpentry or truck driving. Indeed, I have often wondered if the contemporary popularity of truck driving among Tibetan men is a modern spin off from horse riding.
A similar disinclination is seen among Tibetans with respect to reliance on trade or commerce as primary sources of livelihood. For instance, while petty trading forays might be a popular pastime among many farmers and nomads, many rural Tibetans whom I interviewed expressed the prejudice that cheating and trickery are required for success in business. Business as a full-time occupation therefore tends to be stigmatized as un-Buddhist, the unworthy preserve of Muslims and other migrants (including Tibetans from other counties, such as Rnga ba traders in Mgo log).  

These generalizations are meant to capture the gist of broad labor trends that I observed among Tibetans during fieldwork and that were consistently confirmed through numerous interviews with a wide variety of respondents, as outlined in the first section. There are obviously exceptions and deviations from the norm, particularly within the context of rising inequality. However, data is not available to quantify these observations: wage data below the level of relatively privileged “staff and workers” is not available in the official statistics; there is little if any ethnic disaggregation of wage or employment data; and temporary migrants are not usually included in any case. I must therefore proceed through my fieldwork reflections, which are not purely ethnographic given their attempt at generalization.

This employment behavior is most apparent in the pure pastoral areas, such as Mgo log and Yushu in Qinghai, or Nag chu in the TAR, all of which are among the least developed of the Tibetan areas in terms of infrastructure, education levels, per capita GDP and other conventional development measures. However, nomads in these areas systematically avoid menial wage labor or petty trades. As a result, most of the low-skilled occupations at the lower end of the labor hierarchy are filled by Han migrants, typically from Sichuan, and to a lesser extent by Chinese Muslims or Tibetans from farming areas. This includes rudimentary processing activities of pastoral output such as the stretching and tanning of yak and sheep hides. Muslims also tend to occupy the intermediate positions of petty trade, commerce, and service occupations such as catering and butchery. Some Han also fill these intermediate roles alongside their obvious dominance in positions of authority. Indeed, the Han who are involved in business are often related to those in government.

Rnga ba County in Sichuan is an exception in this regard, given that it is known for its successful business community. Indeed, there is a very successful Rnga ba business community in Lha sa. I met one Rnga ba businessman from this community who had made his money building accommodation for Chinese railway construction workers. Obviously, there are probably many similar local exceptions throughout Tibet.


I noted this on several occasions. For instance, in the Sog po Mongolian Autonomous County in Qinghai, I interviewed one Sichuanese woman in July 2003 who had migrated to the county town the year before with her husband and small child and opened up a small restaurant. They had decided to come because the woman’s sister, who was working in the local government, had told her that there were no Sichuanese restaurants in the town and thus business would be good. Both sisters had been born and raised in the county after their parents were transferred there in the 1950s.
Perhaps more significantly, these observations in the pastoral areas hold even when employers are Tibetan, thereby countering the argument that these patterns are not the results of “choice” but are instead caused by various subtle forms of discrimination. Discrimination does exist in Tibetan areas, such as in the contracting of government infrastructure projects to Han construction companies, although here we are considering how Tibetans themselves tend to discriminate in their employment choices. For instance, many of the relatively simple manual tasks related directly to Tibetan activities of animal husbandry that I observed during visits to Mgo log and Yushu in 2004, such as the building of mud enclosure walls for corrals, were being performed by Sichuanese laborers hired by Tibetans. Numerous examples of monastery or temple construction that I visited throughout Qinghai were also based on using Han Sichuanese laborers. Monastery managers, lamas, or senior monks typically oversaw the operations, but work was generally subcontracted to Han construction companies. An assistant of a monastery manager overseeing the construction of a particularly large prayer hall in a monastery near Dar lag in Mgo log, which I visited several times in May 2004, explained to me that Tibetans were not involved in the construction because the idea of working for the monastery for a wage is considered undignified. Notably, in this same case, a large group of Tibetan pilgrims from Rgyal rong (Sichuan) were involved in the construction of a prayer wheel wall in the same monastic compound. However, their work was voluntary; work for the monastery was provided so long as it is seen as a religious act of offering, along the same lines as offerings of food or other forms of wealth. I observed similar patterns in the construction of new temples further north in the mixed pastoral-farming areas, such as in Rong po (Longwu) Town in Reb gong.

Likewise, in many Tibetan businesses, menial wage jobs were often filled by Han Chinese laborers. For instance, during a visit to Rnga ba County in May 2004, I met a confidant of one prominent local Tibetan businessman who ran a popular hotel and restaurant in the county town. The businessman, a known nationalist who had been recently detained, nonetheless employed mostly Han migrants as cooks and waiters, while employing Tibetans, most of them from his extended kin, in managerial positions. His confidant explained to me that local Tibetans are not interested in the more menial range of jobs, at least not for long-term employment. Instead they are more interested in quick cash-generating activities, such as digging for caterpillar fungus or ad hoc petty trading forays to Chengdu. He also noted that there is a widespread perception among Tibetan employers that locals cannot be relied on, even if they would be interested in the menial jobs, given that they

---

66 My observations in Qinghai were confirmed for Central Tibet in an interview with a Tibetan official from the Tibetan Academy of Agricultural and Animal Husbandry Sciences (TAAAS) in Lha sa in November 2004. The official told me how they had tried to offer construction work to farmers in Gzhis ka rtsa at forty yuan a day – a very decent wage – but that many of the farmers were not interested and instead returned to their fields, being more concerned with digging for caterpillar fungus. Similarly, several NGO staff who I interviewed in Lha sa had experienced some difficulty with early attempts to interest locals from Nag chu, a pastoral region of the TAR, in vocational training. This was likely due to the stigmatized nature of the work that the vocational work was targeting.
would most likely be hired through family networks. This would make them more expensive and more difficult to discipline than Chinese migrants, who are perceived as cheaper and more reliable. Therefore, for the menial range of jobs, this Tibetan businessman preferred to employ Chinese migrants.

From another angle, conceptions of status also appear to play a strong role in guiding employment behavior. For example, in one successful Tibetan-owned car repair business in Mgo log that I visited in May 2004 and that employed Tibetan workers, the owner had previously worked in the Public Security Bureau of the county, was married to a Chinese woman from Xining, and, as it happens, had a daughter who had been recognized as the reincarnation of a yogini. In discussions with numerous Tibetan farmers, nomads, workers and scholars in Qinghai, the consensus was that if a Tibetan (that is, Tibetan man) were to undertake the discipline of regular wage employment, the status of the employer would be vital. Working for a small business, whether Tibetan or Chinese run, would be deemed degrading, whereas working for a powerful strongman, a monastery, the government, or above all, a western NGO, would better fulfill a sense of status, even if the wage earned in the latter might be less than the wage offered by the small business.

The one consistently glaring exception to these observations regards gender: young women appear to transgress the stigmatism directed towards low-wage menial employment in the service sector or in small businesses much more readily than the general Tibetan population, particularly before they have married or started to have children. For instance, in the case of the Rnga ba restaurant mentioned above, the one Tibetan working as a waitress in the establishment was a young woman from another county who had been orphaned and had shown strong dedication to engage in disciplined work. Similarly, young women were employed in the hotel for room service. This also extends to non-Tibetan businesses; many if not most of the Han businesses operating in the Tibetan neighborhoods of Lhasa or Gzhis ka rtse, such as small restaurants or shops, typically employ one or several young Tibetan women or girls, no doubt to service the Tibetan clientele patronizing these businesses. Young men are rarely if ever seen occupying the same positions. This gender dimension deserves further research and is not explored here, although it appears to stem from the expected social roles and status of girls and young women, which facilitates their entry into varieties of urban service work, such as household nannies or sex work.

The clear ethnic stratification of employment breaks down somewhat in the farming areas, where Tibetan farming families generally show more willingness to participate in low-wage employment. Nonetheless, even in these cases, certain types or conditions of wage employment are deemed more acceptable than others. One common area of low-skill employment in the farming areas is construction work, such as road construction, or in one case that I observed in Mang ra County in Qinghai, the construction of a small hydroelectric project.
Photos were taken by the author in June 2004 in Xunhua County, near Wendi.

In these cases, work was performed outdoors, it was seasonal or temporary, and it involved large parts of the local community, thereby conforming to a sense of communal labor, akin to a harvest season, where all are involved and thus none are stigmatized.

However, even in these cases, Tibetan workers generally appear to have higher wage expectations than Han Chinese migrants, as well as higher expectations of non-monetary conditions of employment, such as shorter working days, less intense work discipline, more frequent holidays, and tolerance of absenteeism, as mentioned above in the case of the Rnga ba restaurant. Higher wage expectations are less evident in the TAR due to the high salaries offered to Chinese migrants on many worksites (such as the railway) and from which Tibetans are more or less excluded. Nonetheless, differences in wage expectations are much more obvious outside the TAR, given that typical wage rates for low-skilled Muslims or Han in places like Haidong in Qinghai or Linxia in Gansu can be very low. Indeed, one Hui high school graduate who I interviewed in Linxia Town in July 2004 was earning two hundred yuan a month as an office assistant for a local construction company, whereas his co-worker, a foreman with ten years of experience working for the company, earned eight hundred yuan a month. In comparison, unskilled Tibetans (men and women) working on the dam construction in Mang ra County mentioned above earned 540 yuan a month, which was a typical wage for most Tibetans I met in rural Qinghai doing unskilled construction work.
These observations were instantiated by a construction project that I investigated in Lhasa in November 2004. The government had started a renovation project along some of the main tourist streets of Lhasa in September 2004, which involved replacing the outer facades of new, recently constructed buildings with molded Tibetan-style fascias. The work was contracted to Chinese construction companies and employed only Han Chinese migrants, even for jobs such as painting the Tibetan-style motifs on the new facades, despite the fact that the skill set required was perfectly suited for local Tibetan artisans with experience in the construction of Tibetan facades and the painting of authentic Tibetan motifs.

67 See my anonymous article on this issue in Tibet Information Network, “Central Lhasa Gets Facelift with ‘Tibetan Characteristics,’” TIN News Update (London: Tibet Information Network, 30 December 2004). Given that TIN has been defunct since October 2005 and its website has not been functional despite a commitment to keep it running, I abrogate TIN’s policy of anonymity and assume my right as sole author of this article, along with other TIN articles that I wrote from 2003 to 2005. All of the photos in this article were also my own and are reproduced here.
Bias was obviously accorded to Chinese construction companies in the contracting of such projects. However, one western INGO worker who had been living in Lhasa for several years, was fluent in Chinese, and had done some fieldwork among these Chinese companies and workers explained to me that another reason for the lack of Tibetan involvement was the fact that Tibetan construction companies and their workers or artisans are more expensive and take longer to complete a job than the Chinese companies and migrants, even though their work might be of higher quality. Subsequently, I questioned several Tibetan officials and scholars about this and they all generally concurred. While these considerations do not excuse the blatant discrimination against Tibetan businesses in construction contracting and the lack of preferential treatment for Tibetan workers in Lhasa, they nonetheless reveal interesting aspects of the wage and work expectations of Tibetan artisans and construction workers in Lhasa.

A similar problem also faces various Tibetan attempts to run factories, such as textile or carpet making factories, particularly in the face of increasing migrant competition in these activities.\(^{68}\) It is not the case that Tibetans cannot run effective companies or factories (as is often argued). Rather, many Tibetan businesspeople exiled in Kathmandu have set up very efficient, competitive and profitable carpet or textile factories. Yet in these cases, most manual labor is performed by Nepali workers, or even by Biharis migrating from India.\(^ {69}\)

These dilemmas were succinctly described to me by Bkra shis tshe ring, an enigmatic Tibetan intellectual, entrepreneur and philanthropist in Lhasa;\(^ {70}\)

\(^{68}\) These observations are based on market research that I conducted for one textile factory in the TAR in 2003 and interviews in 2004 and 2005 with three Tibetan carpet traders and five INGO workers who had been involved in various attempts to set up carpet making ventures.

\(^{69}\) Interview with a Tibetan carpet factory owner in Kathmandu, June 2003; and discussions with Malika Shakya, a Nepali PhD candidate at LSE who researched textile industries in Kathmandu.

\(^{70}\) Interview, Lhasa, November 2004.
The shoe menders around my house have been replaced in recent years by Chinese shoe menders. Since the 1960s the shoe menders had been Tibetan. There are several reasons for this. One is that the Tibetans are lazier, which comes from social legacies, or the money consciousness of Tibetans versus the Chinese. Another is the hardship of the work that Chinese migrants do. Tibetans can not compete with the incredibly hard working Chinese shoe menders. The Chinese shoe menders are incredibly hard working. Now they might be earning thirty to forty yuan a day, although they would have started by earning much less. Now they might stop for a short lunch, whereas before they were not even stopping for lunch. This process of replacement by Chinese has happened to every Tibetan trade, including the shop and restaurant businesses.

As a result, Han or Muslim Chinese migrants end up occupying much of the low-skilled off-farm employment that has been generated from recent economic growth. Garbage collection offers an extreme example. In all the Tibetan towns of Qinghai that I visited, this trade was almost exclusively plied by Han migrants. The only exception I saw was in the Tibetan neighborhoods of Lhasa and Gzhis ka rtse, where uniformed Tibetan women worked as street cleaners. However, they were evidently public employees, and thus their work was relatively privileged, given the benefits that can accrue from urban public employment in the TAR.

Thus, while the dominance of non-Tibetan migrants in low-skilled employment and small business has given cause to accusations of population invasion and employment discrimination, to a certain degree Tibetans have been complicit in such stratification. Indeed, in another example from fieldwork in Reb gong, a Hui Muslim high school teacher told me that local Muslim businesspeople in fact borrow from monks and lamas in the nearby monasteries, or else from wealthy local lay Tibetans. While such exchanges might be well known to scholars working on these issues, they nonetheless reveal how Tibetan elites with surplus capital, monasteries and lamas included, prefer to act as financiers rather than engage in the messiness and visibility of business. It could even be argued that this arrangement confirms a sense of hierarchy wherein Tibetans (at least elite Tibetans) are at the top, being served by Han and Muslims.

Livelihood Strategies and Ethnic labor Stratification

These attitudes towards work appear to derive from typical allocations of family labor within rural Tibetan households since the reform period. A stereotyped albeit common caricature illustrates this, based on many of the rural families I visited in Qinghai, Gansu, and Sichuan, and supplemented by my experience of living among newly arrived Tibetan refugees in India and Nepal from 1995 to 2001. If a household has four or five children, typically one child is kept on the homestead. This child, male or female, receives little if any education (primary at best), marries a similar person in the community, and together they maintain the household and

---

71 See, for instance, Ma Rong and Tanzen Lhundup, “Temporary Migrants.”
72 At that time, the loans typically had interest rates of around 8 percent per annum.
care for the elderly. One or two children pursue secular education, depending on the size, attitudes or wealth of the family, with the hope that they complete secondary school and obtain a respected job, such as working in the government or as a teacher. One child obtaining such work can effectively secure the future livelihood of the family. Another child might be sent to a monastery or nunnery, or else into exile with the hope of meeting the Dalai Lama, receiving an education in one of the “Dalai Lama’s schools,” or, best of all, making it to the west through contact with westerners, and possibly even marrying one along the way.

Beyond the political irony that households often end up with a monk, a public employee, and a refugee in the same family, these typical strategies carry several other implications. First, although each household might have one or two children pursuing post-primary secular schooling, this only leads to a rate of about half the children receiving such schooling. In other words, this strategy is not contradictory with sustained high rates of illiteracy. Second, quick cash earning activities, such as caterpillar fungus digging or seasonal construction work, do not necessarily obstruct these strategies, so long as they do not constitute long-term employment or undermine the maintenance of the asset base. Finally, long-term low-wage employment is generally not on the list of options despite low levels of education, unlike poor rural Han or Muslim households, where children are typically expected to enter wage employment or commerce after a certain amount of education. These strategies do target long-term wage employment, albeit at a higher level of the labor hierarchy or with higher wage and non-wage expectations than would be expected of relatively income poor rural households with very low levels of education on average. In other words, a “proletarianized” working class attitude is typically not observed among most rural Tibetans, whereas it is among many rural Chinese or Chinese Muslims.

Deeply-rooted cultural conceptions of hierarchy and dignity obviously play a central role in these employment attitudes. Tibetans, particularly in Amdo and Khams, and especially Tibetan nomads, essentially conceive of themselves as the farmer/nomad-warriors, guardians of the land, and ready for mobilization into warfare whenever need be. This realization actually came to me most strongly in the course of a debate between an Australian woman and one male Amdo Tibetan high school teacher in July 2004 in Chab cha about the gendered division of labor in Tibetan households. His rationalization for the fact that Tibetan men do little or no housework was that the responsibility of men was to go to war (or otherwise protect the household, village, or tribe). Surprising though this was given that he and his wife were both secondary school teachers and he could barely do a single chin up, for me it was a remarkable gendered expression of a Tibetan sense of hierarchy. And despite his own lack of physical robustness (albeit he did enter into a bar brawl a few weeks after this conversation), the last point about going to war still holds much salience in the rural areas today, in light of ongoing feuding in

many pastoral and mixed pastoral-farming areas. Accordingly, within this sense of hierarchy, trade and commerce are considered lower positions to farming and herding, and menial wage employment is downright degrading (unless it constitutes service for a monastery, a powerful leader, or a status-bearing organization).

While these cultural conceptions of hierarchy help to explain the typical employment preferences of rural Tibetans, the importance here is not in the cultural variations of attitudes towards work per se, but that Tibetans generally have the relative freedom to choose on the basis of cultural criteria, rather than being driven into alienating wage labor through impoverishment. This is in contrast to many areas of the world where groups might hold similar notions of labor hierarchy yet have been compelled to demote by poverty. In other words, Tibetan nomads and farmers manifest a capacity to choose according to their cultural preferences. This appears to concur with the analysis of the previous section that assets and subsistence capacity seem to offer better indications of the wealth factors underlying these employment decisions than conventional income measures.

**Subsistence as Wealth**

This question of what drives the employment decisions of rural dwellers touches on debates over the rationality of “peasant” behavior in much of the development literature. The standard position taken by much of the (officially sanctioned) Chinese literature on Tibet is that, similar to modernization theories of both conservative and Marxist flavors, the behavior of rural Tibetans is rule-bounded by customs and institutions, which adapt poorly to modern market mechanisms due to an absence of rational or capitalistic norms. The absence of such rational “market economy” norms in turn inhibits investment and accumulation, particularly in comparison to their Chinese lowland cousins who have been much more adept at taking advantage of market incentives in the reform period. The implication is that Tibetans need to be tutored by the example of their more “advanced” Chinese cousins, primarily through education and migration-induced emulation.

Debates among Chinese scholars or policy makers generally do not dispute the underlying assumptions of this narrative, but focus on whether tutelage should take place gradually, in a carefully regulated manner, or through fast-track, leap-over strategies of uninhibited integration into the rest of China.

---

74 Again, see Pirie, “Feuding,” and Yeh, “Tibetan Range Wars.”

75 From a different perspective but with a focus on similar issues, see the excellent discussion of the discourse of the “lazy Tibetan” in the work of Emily T. Yeh, “Taming the Tibetan Landscape: Chinese Development and the Transformation of Agriculture.” PhD diss., University of California, Berkeley, 2003; and “Tropes of Indolence and the Cultural Politics of Development in Lhasa, Tibet,” *Annals of the Association of American Geographers* 97, no. 3 (September 2007): 593-612.

76 Notably, as analyzed below, the need for Tibetans to undergo cultural change is often highlighted. Indeed, official insistence that Tibetans need “education” refers not only to conventional secular education, but also to what might be called “cultural education,” or education that changes these culturally-bounded forms of economic behavior. Again, see Yeh, “Tropes of Indolence.”
As clarified in the second section, official statistics do not appear to support the assertion that, on average, Tibetan farmers invest any less than Chinese farmers elsewhere in China. Thus, whatever the cultural preferences of Tibetans, these preferences do not appear to obstruct thrift and productive accumulation, at least not within agriculture or any more than they would elsewhere in rural China. Instead, the relatively greater asset wealth or subsistence capacity of rural Tibetan households suggests that the various dimensions of wealth in subsistence-based rural economies are not being measured properly by conventional income measures and that Tibetans are actually wealthier than they appear in the income statistics, thereby helping to explain their apparently paradoxical employment behavior described in the third section.

However, even these points considered, there is still contention in the literature over these alternative dimensions of wealth given that they are not seen as appropriate bases for capitalist accumulation, or accumulation that is based on an increasing productivity of labor rather than a simple hoarding of wealth in an unproductive manner. Examples include the tendency often-observed among pastoralists of maintaining large herds rather than moving towards commercial forms of ranching, or among farmers of investing agricultural profits and even migrant wages in rural housing and conspicuous consumption rather than in agricultural modernization or business development.\(^77\) The question is why, when given the freedom, do we often see rural folk maintaining or even reinforcing their basis in subsistence, even though we (and they) know that this is a dead-end option with respect to the future of wealth-generation in the economy? This question underlies much of the theoretical presumptions that influence policy making in Tibet.

**Rationality and Culture**

The standard approach taken in the Marxist-inspired Chinese literature to explain rural development in Tibet usually follows a culturalist modernization theory paradigm. This is perhaps best represented by the work of Wang and Bai.\(^78\) In their groundbreaking 1986 book, *The Poverty of Plenty*, they refer to a “two-way initiative” that started in the early reform period; one towards the “commodity economy,” that is, intensified capitalist modes of accumulation, and the other retreating back into the so-called “natural economy.” The latter initiative, which they argue characterizes most of the ethnic minorities in western China and especially Tibetans, is due to “the intrinsic determinant of backwardness” or “the poor quality of human resources.”\(^79\) “This is the immature social system and its

---

\(^77\) Obviously, these are stereotypes. Evidence from fieldwork, such as in Goldstein et al., “‘Going for Income,’” indicates that considerable investment in rural Tibet has also been recently taking place in various off-farm businesses, particularly in those related to transport or housing construction. Substantial household investments in education should also not be overlooked.

\(^78\) Wang and Bai, *Poverty of Plenty*.

vicious circle of poverty.”80 The more a region is backward, the less likely catching up will be achieved through simply “relaxing controls,”81 given that the resources needed for the development of a commodity economy will be diverted to the natural economy, thereby undermining wealth creation.82 They therefore advocate that the real challenge in China’s backward regions constitutes “reversing the attitude of the local inhabitants towards social wealth and changing their traditional ways of exploiting natural resources.”83

They also explicitly address the paradox of income poverty amidst a strong asset base, albeit in a derogatory tone. They note that impressive figures of wealth can be achieved in backward regions “at the expense of ruining resources through traditional means of exploitation. From these indicators it is impossible to tell if the economy is being transformed from a natural economy, or what the social implications of individual prosperity in backward regions might be.” They substantiate this assertion with several anecdotal cases from Qinghai, that is, a herder who was very wealthy by Chinese standards but “never traded his livestock and could not even afford a new pair of shoes, while all he lived on was gruel.”84 A Tibetan county that was apparently the richest in China in the early 1980s on the basis of per capita livestock holdings had a “way of life and mode of production among the people [that] showed little change from the remote past.”85

This assessment of Tibetans remains common in China, as it is in the idealized caricatures of Tibetans as peaceful non-materialist ecologists in much of the western media. Wang and Bai related such Tibetan naiveté to the ongoing influence of “such negative religious ideas as withdrawing from the world and fatalism,” causing them to reject modern agricultural techniques due to a variety of superstitious concerns, or else using new wealth to build temples in competition with other newly rich.86 Many of these views were echoed in my fieldwork by a variety of Chinese scholars, officials or lay people, and some modernization-advocating educated Tibetans, who decried that poor Tibetan rural communities consistently pour their wealth and savings into monasteries or religious monuments rather than productive investments, thereby perpetuating their cycle of poverty. Officially, the Chinese government also adopts this rhetoric by explaining that rural poverty in

80 Wang and Bai, Poverty of Plenty, 65.
81 Wang and Bai, Poverty of Plenty, 175.
82 Wang and Bai, Poverty of Plenty, 32.
83 Wang and Bai, Poverty of Plenty, 92.
84 Wang and Bai, Poverty of Plenty, 91. Presumably, they are referring to roasted barley flour (rtsam pa), which is the basic (and nutritious) staple of Tibetans. While the average Chinese person and most westerners look upon the hand-kneaded buttery paste with much distaste, this is obviously not an issue for those raised on roasted barley flour.
85 Wang and Bai, Poverty of Plenty, 91.
86 Wang and Bai, Poverty of Plenty, 34.
Tibet stems from a slow cycle of low output, low investment, low accumulation, leading again to low output.\textsuperscript{87}

These perspectives generally mistake the symptoms of distorted development for causes, given that the impacts of disempowerment are utterly ignored. For instance, \textit{Wang} and \textit{Bai}’s far more rigorous analyses of the failure of aid and various economic projects in the TAR (which they also blame on Tibetan backwardness), deals mostly with the state-run economy from the 1960s to the early 1980s. Notably, they ignore the late introduction of communes in the TAR from the late 1960s onwards, followed by failed attempts at large-scale crop diversification, ecological disaster and widespread hunger by the late 1970s.\textsuperscript{88} They also ignore the earlier and more radical introduction of communes in the mid-1950s in the Tibetan areas outside the TAR, which took place despite the fact that these areas had not yet undergone the intermediate stages of so called “democratic reforms” as elsewhere in China.\textsuperscript{89} This was followed by widespread Tibetan uprisings in Sichuan, Gansu, and Qinghai and an intense government counterinsurgency. Moreover, Qinghai, Gansu, and Sichuan were among the provinces in China worst hit by the famine of the Great Leap Forward in 1959-61.\textsuperscript{90}

In this context, it is difficult to argue that an adult male herder interviewed in Qinghai in 1984, literally within a year of de-collectivization and in a county that had experienced uprising, counterinsurgency, and famine only a few decades earlier, not to mention the subsequent Cultural Revolution, had a way of life that “showed little change from the remote past.” Indeed, the individual household responsibility system itself was a fundamentally new form of rangeland management, based as it was on individualized land use and thus differing from both traditional and collective pastoral systems, which were both organized on collective principles.\textsuperscript{91} In contrast, farming areas generally had some experience with individualized land use prior to collectivization. Moreover, most Tibetans were themselves completely divorced from any sense of agency within these processes of radical transformation, which would tend to reinforce a conservative response to change, in contrast to China where both revolution and reform were indigenously generated processes \textit{par excellence}.

In addition to these Tibet-specific considerations, \textit{Wang} and \textit{Bai} do not consider the effects of the price scissor model of urban-rural development, whereby agricultural prices were suppressed up to the 1980s in order to subsidize urban

\textsuperscript{87} See People’s Republic of China, \textit{100 Questions and Answers about Tibet} (Beijing: Information Office of the State Council, 2001), Question 22.

\textsuperscript{88} Dreyer, “Economic Development,” 415.


\textsuperscript{91} I am indebted to discussions with Ken Bauer and Melvyn Goldstein for these insights on the changing systems of rangeland management.
industries; the associated policies are widely regarded as having caused heavy productive disincentives in western China throughout this period. Nor do they consider the uneven character of regional development policy, even though these were subjects of heated politicized debates during 1980s. Therefore, the inefficiencies of the highly state-centralized and militarized economy of the TAR and other Tibetan areas in these years can hardly be attributed to the entrepreneurial disability of local Tibetans.

Perhaps the most significant refutation of Wang and Bai’s argument is the fact that rural Tibetans are thrifty and productive, as discussed above, and they are price-responsive with regard to both commodity prices and wages. In the latter case, Tibetans can be seen to quickly shift their livelihood strategies in response to price changes, such as in the case of the booming caterpillar fungus trade, or in relation to collapsing wool prices and favorable meat and skin prices. Indeed, based on his fieldwork in 2005 in a pastoral area of the TAR where illiteracy remains very high, Melvyn Goldstein noted that nomads had been using a subsidized loan program to innovate seasonal ranching, purchasing young animals in the spring, fattening them in the summer and selling them for meat and skins in the fall. The reason for this shift to a commoditized form of ranching was precisely because prices for meat and skins had been very favorable in recent years, whereas the prices for wool had been very poor. He also noted that local township officials had been actively involved in promoting and supporting the changes. This latter institutional dimension again begs the question of whether the behavior of rural Tibetans can be judged independently from the broader context of governance and/or state control.

In other words, given the right incentives, there is no particular reason why Tibetans would not display a certain degree of market rationality, even under conditions where they continue to have “poor quality of human resources.” Rather, this analysis suggests that Tibetans will be economically rational (in a neoclassical sense) when price signals are in harmony with their cultural norms, particularly with respect to labor hierarchies. Moreover, subsistence modes can co-exist or switch back and forth with more market-oriented economic behavior, even within a single household. This seems to imply that subsistence production is part of a larger set of choices within calculated livelihood strategies, rather than simply constituting a deterministic outcome structured by physical, human or social capital, culture, and so forth.

---

92 For extensive analyses of these policies and their related debates, see Dali Yang, Beyond Beijing: Liberalization and the Regions in China (London: Routledge, 1997), and John Knight and Lina Song, The Rural-Urban Divide: Economic Disparities and Interactions in China (Oxford: Oxford University Press, 1999).

93 Conversation with Melvyn Goldstein, November 2005, Berlin, and subsequent communications.
Subsistence and Strategy

Returning to the discussion of subsistence capacity at the end of the second section, we can see that, if and when a condition of absolute subsistence is met, household members have the individual or collective freedom to allocate their labor as they see fit, regardless of immediate considerations of productivity or marginal returns. Conversely, the incapacity to meet subsistence needs compels farmers or pastoralists to accept wage labor, as per various socialist theories of labor commodification.

However, several distinctions must be made from the classic European cases of labor commodification that informed such socialist theories. The classic cases were in the throes of industrialization and were at the colonial core of the international economy, with the political and administrative power to control and restrict migration from tropical regions, all of which worked to support the higher wage expectations in these regions. Tibet holds an inverse position; it is on the periphery of Chinese industrial power, with a paucity of economic opportunities outside agriculture, and no ability to limit in-migration. Thus, there is a gaping asymmetry between higher wage expectations and the sheer scarcity of higher remunerated economic opportunities that would conform to these expectations. Moreover, these disjunctures are exacerbated by conditions of disempowerment.

In this sense, there is some validity to the insight of Wang and Bai that de-collectivization produced a forward movement into commoditization in the Han areas and a backward movement into the “natural” economy in the Tibetan areas. However, the mistake of Wang and Bai was to attribute these movements to “intrinsic backwardness.” Instead, the introduction of the individual household responsibility system in the early 1980s effectively created a “peasantization” of Tibetans; for the first time land use was divided up into small, relatively equal individuated parcels, something that had never existed under either the collective economy or the “old society.” This obviously happened all over China, except that elsewhere in China the individuated plots were generally not large enough to sustain subsistence needs, even if labor productivity has been higher on average. Plots in Tibet have generally been large enough to sustain subsistence, thereby helping to sustain rural Tibetan conceptions of labor hierarchy during the reform period despite the rapid marginalization of rural Tibetans from the dominant sources of wealth and accumulation in the larger provincial economy.

Along similar lines, an extension of the ‘commodity’ or cash economy is not necessarily antithetical to these processes. Tibetans are involved with the commodity cash economy, and thus they cannot base their livelihoods solely on subsistence household production (if ever they did). Today, this is partly because they purchase, consume or invest in modern goods, be they mobile phones, motorcycles or fertilizers, among many others. Perhaps more importantly, rapidly increasing fees for education and health care also act as powerful compelling forces for Tibetans.

to move into cash earning activities, particularly in light of household livelihood strategies that target post-primary education for at least one child. Scarcity of rural cash-earning opportunities in turn drives rural to urban migration.

However, the cash imperative is often overemphasized as a driver of labor commodification, given that it can easily co-exist with subsistence-based livelihood strategies. In fact, the combination is ideal; if subsistence capacity is sufficient, it offers choice as to how and when to engage in cash-earning activities. It offers autonomy from a dependence on regular low-wage employment, or from forced selling of produce at inopportune moments, both of which can have impoverishing implications. The ability to wait thereby confers an ability to access better opportunities if and when they arise.

In this sense, the subjective proclivity for subsistence within rural communities is not merely cultural or symbolic. It also carries important instrumental wealth functions, not only in terms of survival as argued by authors such as James Scott,\textsuperscript{95} but also in terms of providing a position from which market and other forms of economic opportunity can be engaged advantageously. Indeed, although Scott tries to explain the rationality of the peasant’s proclivity for subsistence, he nonetheless portrays this rationality as resulting from a survival logic engendered by the condition of living on the verge of destitution. The interpretation here differs, along the lines argued by Polly Hill discussed below, in that the reinforcement of subsistence capacity can serve as an important wealth-supporting strategy within rural transitions to more marketized forms of production, exchange, and employment.

In this light, the standard derogatory association of subsistence with poverty or traditional pre-market economic systems may actually be the inverse of how subsistence is subjectively experienced by rural communities. This was precisely the point of Polly Hill in her criticism of the conventional usage of the concept of subsistence in much of development economics.\textsuperscript{96} She argued that it is usually only rich rural households that can hope to attain a degree of self-sufficiency and she therefore critiqued the common assumption that traditional agriculture is characterized by degrees of subsistence, which are inversely related to market integration, given that this assumption ignores the role of inequality within such agricultural systems. Moreover, she pointed out that it is precisely these wealthy households, which achieve some level of “subsistence,” that also enjoy the most lucrative non-farming occupations. From this argument, it is clear how achieving a minimum threshold of subsistence capacity offers a freedom to act, whether for profit or non-profitable social approbation, and that this freedom is both instrumental for and symbolic of wealth.

Moreover, the commodification of certain product markets can ironically reinforce resistance to labor commodification. For instance, the current boom in


\textsuperscript{96} Polly Hill, \textit{Development Economics}, 18-20.
the caterpillar fungus trade in Tibetan areas has certainly brought about a commodification of caterpillar fungus and significantly increased the cash income component of Tibetan rural incomes, particularly in remote pastoral areas that previously were the least integrated into the cash-based economy. This commodification of caterpillar fungus has thereby buttressed the ability of these same households to maintain a degree of autonomy from outright dependence on wage employment precisely because it provides a lucrative source of cash income in a manner that avoids wage employment and that does not undermine their subsistence asset base.

Thus, to the disappointment of market fetishists, neoliberal and Marxist alike, the extension of commodity markets will not necessarily cause a “capitalist” transformation of social structure. Rather, as per the insight of Polanyi, the fundamental transformation underlying market society is not found in the existence of commodity markets, which have existed for millennia, but in the creation of labor markets, which requires labor commodification. Historically, this has usually taken place through various structural and institutional processes that undermine rural assets and/or income streams, and thus the ability of rural households to achieve absolute subsistence, thereby compelling the search for wage labor at any wage and of any type.97

Concluding Reflections

While it is not clear to what extent rural Tibetans are poor, long-term dependence on low-wage employment does not seem to be a panacea. It will probably not compensate for their marginalization from the rapid economic growth in their regions, as indicated by rapidly rising urban-rural inequality in the TAR since the mid-1990s, to a level far higher than even the next most unequal province in China.98 It also certainly represents a demotion for many rural Tibetans within local labor and wealth hierarchies in comparison to the recent past. More importantly, participation in low-wage labor does little to overcome the growing gap between the average means and ends of rural households, given the escalating costs associated with post-primary education and health care, among other factors. The caterpillar fungus commodity boom has somewhat offset the impact of sharply declining terms of trade in traditional rural commodities up to 2005, although, like


98 For details, see Fischer, State Growth, Chapter Four. For a more recent update on the inequality data, see Andrew M. Fischer, “Perversities of Extreme Dependence and Unequal Growth in the TAR,” Tibet Watch Special Report (London: Tibet Watch, August 2007).
all commodity booms, it may only be postponing adjustment to a later date. From this perspective, it is understandable why many rural Tibetans resist low-wage employment and place their bets on getting at least one child into some form of more gainful employment, at best in a privileged public sector job, even if the odds for the latter are increasingly stacked against them. 99

Against this backdrop, in certain pastoral areas of Qinghai, Gansu, and Sichuan, government strategies of poverty alleviation and environmental protection have recently started to promote the direct dispossession of land assets through a combined emphasis on the whole-scale resettlement of some nomadic communities into urban areas. The poverty dimension of this policy derives from the conventional wisdom in China that greater exposure to off-farm employment leads to substantial improvements in rural incomes, as discussed in the second section. Similarly, flooding in lowland China is usually blamed on overgrazing and rangeland degradation in the highlands (i.e., Tibet). Ergo, urbanization, urban expansion and the relaxation of urban household registration (hukou) have logically come to play a central role in poverty alleviation strategies in recent years.

However, as elsewhere in China and the world, urbanization only makes sense as a strategy of poverty alleviation insofar as urbanizing migrants are successfully employed upon reaching their destination, and at a wage that compensates for their loss of subsistence. Yet this employment consideration appears to be singularly lacking in much of the towns across Tibet, particularly since the recent flurry of construction activity has been mostly captured by Han construction companies and non-Tibetan migrants. 100

Rather, an almost perverse faith in “the market” predominates in local government circles, as well as among Chinese officials and scholars; 101 exposure to the town environment and to non-Tibetan migrants is presumed to encourage pastoralists to engage in trade and commerce, leading the lot of them to become petty entrepreneurs, despite the almost complete absence of productive secondary activities in the towns themselves. 102 Adjustment in the interim is to be supported by the wealth generated from selling off herds, supplemented by basic welfare measures.

Besides the fact that these views ignore or wrongly interpret a wide range of social and ecological issues, from the point of view of the argument here, they are unnecessary given that Tibetans are urbanizing in any case. They do not need government policy to encourage them to see the necessity of this course of action. According to the typical rural household livelihood strategy described in the third

99 For more detail on the notable increase in competition over public sector employment since the early 2000s in Qinghai and the TAR, particularly in relation to the ending of guaranteed employment for high school and university graduates, see Fischer, “Educating for Exclusion.”

100 For further discussion of these issues, see Fischer, State Growth, Chapter Five.

101 These views were constantly repeatedly to me in interviews with a variety of Han (and some Tibetan) scholars and officials in Beijing, Lhasa, Xining, and Chengdu.

102 On the deindustrialization of Tibetan towns in the TAR, Qinghai, and Gansu, see Fischer, State Growth, Chapter Three, and Fischer, “Close Encounters,” 12-16.
section, and given the scarcity of non-agricultural employment opportunities in
the rural areas, often more than half of the members of a typical rural household
are already effectively urbanized, at least on an occasional or seasonal basis, and
this trend will most certainly continue over the course of the next generation.

However, the distinction lies in the degree to which indigenous livelihood
strategies are short-circuited by state paternalism. By undercutting the subsistence
basis of these livelihood strategies, government poverty alleviation and
environmental policies are effectively undercutting the very means by which such
rural Tibetans might transition in a relatively autonomous, self-determined, and
dignified manner. Indeed, a much more effective way to promote urbanization
along the lines already chosen by rural households would be to heavily subsidize
post-primary education and return to a policy of guaranteeing public sector
employment for at least some of the secondary graduates, particularly those from
pastoral areas. Instead, the current market rhetoric of creating a level playing field
amidst an absence of any serious consideration for sustainable employment creation
runs the risk of creating a series of small town ghettos in Eastern Tibet, similar
to the urbanization of Aboriginal communities in Canada and the US. Ironically,
where ghettoization involves the wholesale sell-off of subsistence assets or marginal
gains in wage employment and petty trade, it may actually manifest as decreasing
income poverty given the weakness of conventional income measures to capture
such economic transitions.

In this perspective, the subsistence-based strategies that rural Tibetans devise
and value themselves might actually be quite logical, least-worst options to ride
through the dramatic transitional restructuring that has occurred in their regional
economies since the mid-1990s. To clarify this point, the second section argued
that standard income measures are not well conceived to reflect subsistence or
asset-based wealth, nor transitions from more subsistence to more commoditized
modes of production and employment. That rural Tibetans might actually be fairly
wealthy relative to the rest of rural Western China – at least in terms of
household-level subsistence capacity – helps to explain the commonly observed
resistance among Tibetans towards a dependence on long-term low-skilled
employment, as described in the third section. Even though this is hard to quantify,
it nonetheless helps us to understand how there is an implicit disjuncture between
local wages on offer and local wage expectations. Rural Tibetans certainly sense
this disjunction and resent it. This in turn leads many non-rural and non-local
economists to condemn Tibetan resistance as irrational or backward, precisely
because the disjunctions are hard to measure and thus not amenable to understand
through standard methodologies of economic analysis.

The fourth section synthesized these insights by arguing that the autonomy
achieved by maintaining an asset-base at a level sufficient to meet minimum
subsistence represents a fundamental source of economic opportunity given that
it provides an ability to act strategically. Subsistence therefore serves an
instrumental as well as symbolic (cultural) wealth function within rural
communities. Contrary to arguments that such valuation of subsistence is only a
characteristic of those living close to destitution, this idea that subsistence is an instrument for wealth is comparable to the way that monetary wealth provides freedom within a modern, non-rural setting. Few would contest that the rich can do what they like with their disposable wealth regardless of whether their actions are deemed rational or irrational; this is the privilege of wealth. Similarly, the ability to be unemployed in most poor countries is actually an attribute of middle or upper class status; the truly poor have no capacity to be unemployed. They therefore must work, whatever the work and whatever the remuneration. This understanding of what it means to attain subsistence (and thus, in principle, to be a “subsistence farmer”) may not accord to the ways that non-rural academics or policy makers expect the “disciplined” or “deserving” poor to behave, but this is more likely due to a misreading of the clues rather than any developmental deficiency on the part of rural dwellers.
**Glossary**

*Note:* These glossary entries are organized in Tibetan alphabetical order. All entries list the following information in this order: THL Extended Wylie transliteration of the term, THL Phonetic rendering of the term, the English translation, the Sanskrit equivalent, the Chinese equivalent, other equivalents such as Mongolian or Latin, associated dates, and the type of term.

<table>
<thead>
<tr>
<th>Ka</th>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Other</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dkar mdzes</td>
<td>Kandzé</td>
<td>Chi. Ganzi</td>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>bkra shis tshe ring</td>
<td>Trashi Tsering</td>
<td></td>
<td>Person</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>skye rgu mdo</td>
<td>Kyegundo</td>
<td>Chi. Yushu</td>
<td>Place</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kha</th>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Other</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>khams</td>
<td>Kham</td>
<td>Place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>khams pa</td>
<td>Khampa</td>
<td>Term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>khren tu</td>
<td>Trentu</td>
<td>Chi. Chengdu</td>
<td>Place</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ga</th>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Other</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mgo log</td>
<td>Golok</td>
<td>Place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>rgyal rong</td>
<td>Gyelrong</td>
<td>Place</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nga</th>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Other</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rnga ba</td>
<td>Ngawa</td>
<td>Chi. Aba</td>
<td>Place</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ca</th>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Other</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>gcan tsha</td>
<td>Chentsa</td>
<td>Chi. Jianzha</td>
<td>Place</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cha</th>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Other</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>chab cha</td>
<td>Chapcha</td>
<td>Chi. Gonghe</td>
<td>Place</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ta</th>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Other</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rta bo</td>
<td>Tawo</td>
<td>Place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>rta’u</td>
<td>Tau</td>
<td>Chi. Daofu</td>
<td>Place</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Da</th>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Other</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dar rtse mdo</td>
<td>Dartsendo</td>
<td>Chi. Kangding</td>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>dar lag</td>
<td>Darlak</td>
<td>Chi. Dari</td>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>sde dge</td>
<td>Degê</td>
<td>Chi. Dege</td>
<td>Place</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Na</th>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Other</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nag chu</td>
<td>Nakchu</td>
<td>Place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>Dates</td>
<td>Other</td>
<td>Place</td>
<td>English</td>
<td>Wylie</td>
<td>Phonetics</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
<td>-----------</td>
</tr>
<tr>
<td>Ba</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ba yan</td>
<td>Bayen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>brag ’go</td>
<td>Drango</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>bla brag</td>
<td>Labrang</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dbus gtsang</td>
<td>Ütsang</td>
</tr>
<tr>
<td>Ma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ma ni gang ’go</td>
<td>Mani Ganggo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>mang ra</td>
<td>Mangra</td>
</tr>
<tr>
<td>Tsa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>rtsam pa</td>
<td>tsampa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>roasted barley flour</td>
</tr>
<tr>
<td>Dza</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>mdzo</td>
<td>dzo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>a yak-cow cross-breed</td>
</tr>
<tr>
<td>Zha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>gzhis ka rtse</td>
<td>Zhikatsé</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chi. Rigazi</td>
</tr>
<tr>
<td>Za</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>zi ling</td>
<td>Ziling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chi. Xining</td>
</tr>
<tr>
<td>Ya</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ya rdzi</td>
<td>Yardzi</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chi. Xunhua</td>
</tr>
<tr>
<td>Ra</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>reb gong</td>
<td>Repgong</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>rong po</td>
<td>Rongwo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chi. Longwu</td>
</tr>
<tr>
<td>La</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>lan zhu’u</td>
<td>Lenzhu</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chi. Lanzhou</td>
</tr>
<tr>
<td>Sa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ser shul</td>
<td>Sershül</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sog po</td>
<td>Sokpo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chi. Henan</td>
</tr>
<tr>
<td>Ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>lha sgang</td>
<td>Lhagang</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>lha sa</td>
<td>Lhasa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>lho kha</td>
<td>Lhokha</td>
</tr>
</tbody>
</table>

Fischer: Subsistence and Rural Livelihood Strategies in Tibet
<table>
<thead>
<tr>
<th>A</th>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Other</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>a mdo</td>
<td>Amdo</td>
<td></td>
<td></td>
<td></td>
<td>Place</td>
<td></td>
</tr>
<tr>
<td>a mdo ba</td>
<td>Amdowa</td>
<td></td>
<td></td>
<td></td>
<td>Term</td>
<td></td>
</tr>
</tbody>
</table>

**Sanskrit**

<table>
<thead>
<tr>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Sanskrit</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>yogini</td>
<td></td>
<td></td>
<td>yoginī</td>
<td></td>
<td>Term</td>
</tr>
</tbody>
</table>

**Chinese**

<table>
<thead>
<tr>
<th>Wylie</th>
<th>Phonetics</th>
<th>English</th>
<th>Chinese</th>
<th>Dates</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bai</td>
<td></td>
<td></td>
<td>Author</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beijing</td>
<td></td>
<td></td>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gansu</td>
<td></td>
<td></td>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guizhou</td>
<td></td>
<td></td>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haidong</td>
<td></td>
<td></td>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Han</td>
<td></td>
<td></td>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hui</td>
<td></td>
<td></td>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>urban household registration</td>
<td></td>
<td>hukou</td>
<td></td>
<td>Term</td>
<td></td>
</tr>
<tr>
<td>Linxia</td>
<td></td>
<td></td>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese unit of measurement; fifteen mu = six acres = one hectare</td>
<td></td>
<td>mu</td>
<td></td>
<td>Term</td>
<td></td>
</tr>
<tr>
<td>Nanfeng Bai</td>
<td></td>
<td></td>
<td>Author</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qinghai</td>
<td></td>
<td></td>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salar</td>
<td></td>
<td></td>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sichuan</td>
<td></td>
<td></td>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wang</td>
<td></td>
<td></td>
<td>Author</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xiaoqiang Wang</td>
<td></td>
<td></td>
<td>Author</td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Turkestan</td>
<td></td>
<td>Xinjiang</td>
<td></td>
<td>Place</td>
<td></td>
</tr>
<tr>
<td>Chinese unit of currency</td>
<td></td>
<td>yuan</td>
<td></td>
<td>Term</td>
<td></td>
</tr>
<tr>
<td>Yunnan</td>
<td></td>
<td></td>
<td>Place</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bibliography


