

# BETWEEN RICE AND ROAD

## Chinese rice farmers' strategies to preserve home resources in a migration context

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It is estimated that up to 260 million internal Chinese migrants, corresponding to one third of Chinese farmers, have left their rural homes – most of them to work in the cities of the east coast of the People's Republic of China (Ye et al. 2013). One reason for this massive rural-urban migration has been the rapid transformation of traditional farming practices, which set free rural labor by replacing humans with machines. However, due to uneven regional economic development, to a welfare system that privileges urbanites, and to a household registration system that prevents rural Chinese from permanent settlement in big cities, Chinese farmers are caught between the pressure to migrate and the need to preserve home resources. Through selected case studies my PhD project investigates how rice farmers in China strategically use and form their skills to act in this difficult situation.

### The lens of skill

The project is located at the intersection of three different research fields: migration studies; peasant studies and agro-anthropology; and anthropology of skilled practice.

Migration and peasant studies have greatly enhanced our knowledge on migrants' and farmers' decision making and agency. However, scarce attention has been paid to the study of internal migration, to China as a research region, and to the role of skill in migration strategies (see Kaufmann 2011). In contrast, the anthropology of skilled practice has – throughout what has come to be called the «apprenticeship

debate» (Marchand 2010) – elaborated its research mainly on crafts. This has contributed to the understanding of skill and the processes of its transmission, formation, and transformation, but these insights have hardly been applied in a setting outside of craft production.

Skill may be understood in at least two different ways. On the one hand, the concept of skill relates to a tacit, contextual, subjective, and embodied knowledge, in the sense of the «sentient ecologist» Tim Ingold (2000): skill is embodied, yet it is not individual but lies in the interaction of the practitioner with his social and material environment. Skill is transmitted through practical experience, observation, and training (ibid.: 352-54). The anthropologist of technology François Sigaut (1994: 438) makes a similar point, distinguishing between knowledge and skill: Knowledge becomes skill through a learning process, namely «the fading of knowledge in the process of [...] embodying or incorporating it».

On the other hand, skill may be understood as a discursive construct. In the context of the commodification of labor, skills may be employed to present privileges of certain social groups as natural, downgrading others, e.g. migrants or women (Eyferth 2009: 12).

The missing tangibility of skill that results from these understandings may be the reason for the common ignorance of the concept. Hence, while part of my dissertation is concerned with agricultural deskilling, this article focuses on how farmers act strategically by employing their skills in

preserving rice fields as a resource in a migration context. I argue that a look on rice farmers' skills further contributes to understanding their decision making.

The data presented here draw on six months of fieldwork in 2011, in urban Shanghai and Green Water<sup>1</sup> Village, Anren County, Hunan. Hunan is a densely populated southern-central Chinese province, characterized by rice farming and rural emigration. The village counts 2066 people in 509 patrilineal households, temporary migrants included (Wu 2010: 278). Data are based on direct observations, on narrative interviews with left-behind and migrant household members, and on two local gazetteers.

### A century of change

Currently, Chinese rice farmers are confronted with an accelerated modernization, after a century of rapid, massive political and socio-technical change. Green Water villagers followed the national transitions from a situation of rich landlords vs. agricultural laborers, to land reform (1940s-1950s), collectivization in a socialist economy (1950s-end of 1970s), and finally de-collectivization and family farming. Besides, villagers have quickly moved away from traditional farming methods (seed and organic fertilizer production; manual weeding, harvesting and threshing). Instead, they have widely accepted Chinese Green Revolution technologies (hybrid seeds, farm chemicals). Along with mechanization, improved irrigation, and double-(rice)cropping, these were propagated by the state in the 1960s and 1970s (CCACG 1996: 285-97).

In the 1980s, land use rights were equally allocated to households on a *per capita* basis. Today, land is still collectively owned and villagers are forbidden to sell land or use it for non-agrarian purposes. On average every villager is attributed 0,69 *mu*<sup>2</sup> of wet and 0,11 *mu* of dry land (Wu 2010: 278). Wet land has higher quality, being suitable for rice cultivation. Yet, villagers perceive good land as scarce. They also state that there have not been adjustments for 30 years, and now land is actually distributed slightly unequally. This is due, among others, to changing household demographics and the *de facto* loss of land once a woman marries into her husband's household (where she may access her husband's land, however).

As compared to before, my informants – many of whom had experienced famine in the 1960s – welcome the new transitions, including higher living standards and the replacement of the agrarian tax in 2006 by subsidies. Yet, they are also highly aware of rural-urban disparities.

### Migrants' dilemmas

The economic reforms of the 1980s set free more than half of the rural labor in Anren County (CCACG 1996: 289). In Green Water, I did not notice any households without rural-urban migrant members.

Reasons given for migration are mainly economic. These do not stand alone, however: the unmarried Zhou Yuemei holds the only university degree in her family, for example. Her income as an office worker in Beijing enabled her younger brother to build a new house – the condition for finding a wife –, and her younger sister to attend vocational training. Her father, mother, and brother, a migrant construction worker, left-behind rice farmer, and migrant excavator operator respectively, could not have afforded this alone. Investment in education is perceived as the only way to change the family's fate.

As in other parts of China, migrants consist mainly of the rural young and men of all ages. This is linked to patrilineality. Since sons are expected to care for the aged parents, while daughters become part of their husbands' families, it is important that sons enjoy the benefits of migration. Moreover, the traditional ideal household division of labor divides men's and women's work in an outer and an inner sphere respectively, encouraging men to go out to gain an income. Women, in contrast, are the *de facto* caretakers of their parents-in-law and small children. Therefore, many women migrate young and return for wedding and childbirth. Sometimes they then migrate again, leaving the children with the paternal grandmother.

As elsewhere, villagers migrate along village networks, which also constitute institutionalized patterns of knowledge transmission. Most male Green Water migrants find employment in construction, while many female migrants work in textile factories, in Guangdong and other provinces. Exceptions occur when university graduates find

<sup>1</sup> Village and informants' names are pseudonyms.

<sup>2</sup> 15 *mu* = 1 hectare. Left-behind household members in Green Water farm about 0.5 *mu*.

admired office jobs, when connections to local officials pave other ways to earn an income, or when richer households set up a business.

Once in the city, Chinese rural migrants usually work without official registration and in low-wage jobs (where one person may still earn double of what a rice farming household earns). This is due to the household registration system (currently in the process of abolishment), which has until now banned rural citizens from permanently settling in the city. Connected to this is a dual rural-urban welfare system. It binds rural children, old, and sick people to their home towns by refusing them school attendance, healthcare, and pensions elsewhere, and impedes access to the substantively better urban welfare system (Ye et al. 2013).

In view of this unequal welfare system and great rural-urban income gaps, there is an enormous economic pressure to migrate. Yet, concurrently resource and property preservation is crucial and rice fields form an important safety net for all household members. Importantly, as opposed to other crops, wet rice fields cannot be allowed to lay fallow if their value is to be preserved. This means that farmers migrate strategically, deciding who to leave at home tending the fields – usually along the gender and age migration patterns mentioned above, but also in view of household members' particular skills.

### Employing skills strategically

In this dilemma of migration pressure and needing to preserve home resources, skills are employed to act strategically. The reservoir of rice farmers' skills comprises different, interconnected forms of knowledge and skill: technical, embodied, and social knowledge, embedded in their particular worldview. Skills do not relate to rice farming alone, but also to the wider economy and general social, cultural, and economic survival. Below, I will exemplarily refer to skills needed for transplanting and harvesting, both peak season activities with high labor input.

In Green Water, transplanting rice seedlings is most common and traditionally a women's task. It involves raising seedlings in a seedbed for a month and then transplanting them into a wet-field. It requires technical knowledge, e.g. how to treat the seeds, make them germinate, and grow. The right moment of transplanting has to be estimated in view of the weather and the lunisolar calendar. The latter provides information about auspicious days for weddings, funerals, or relocations, and, importantly, for agricultural tasks. Moreover, farmers (usually male) need to be familiar with

preparing the fields for the varying needs of different rice varieties. They have to calculate how many seedlings are needed for variable field sizes and shapes. Afterward, nimble fingers (usually female) are crucial to replant the seedlings regularly and quickly, because loose seedlings rot after one night. Transplanters need to know the right depth and distance, varying with each rice variety. Knowledge is also necessary to perform the symbolic action of «opening the door of the seedbed», previously linked with offering paper money to local gods to ensure high yields. Besides, social skills are needed to organize villagers in an effective inter-household labor exchange. Moreover, when opting for or against labor-intensive transplanting, farmers need to know its advantages: scarce natural resources (land, water), requiring high inputs for fertilizer and pesticides are used optimally. Weeds are controlled effectively, because plants grow and ripen evenly. Yields are much higher compared to broadcasting (direct sowing). The high requirement of labor may also be an advantage in times of population pressure and few other employment opportunities.

Transplanting is practiced in Yuemei's family. Her father eventually returned home to prepare her brother's house construction and wedding, and to help rearing the new grandchild. With mother and father at home, and the mother's social skills of mobilizing left-behind village women to engage in a fine-tuned labor exchange, the parents decided to continue manual transplanting.

It is also possible to forego manual transplanting, either by resorting to mechanized transplanting or to broadcasting. In a nearby village, the elderly Hu couple – left behind by their children – switched to broadcasting, in light of their aged bodies and lacking access to strong labor or transplanting machinery.

In the latter case it is noteworthy that the technical and social knowledge about broadcasting – an ancient technique that begun to be replaced by transplanting more than 2000 years ago in China (Bray 1984: 285-86) – has made its way again into contemporary migration affected households.

As opposed to transplanting, harvesting is a traditional male task. In Green Water, rice is harvested with sickles or a combine harvester. Combines are expensive: almost five times an annual rice farming household's income. The wealthy household of Zhou Hugen saved money for eight years to buy the only machine in Green Water. The costs of renting Hugen's service are considerable for subsistence farmers. Yet, the time and labor saved are also significant: Hugen claims that his machine cuts and threshes one *mu* in ten minutes. In comparison, four persons with sickles need

one day for cutting one *mu*. More helpers are optimal, however, due to the great time pressure at harvest. Importantly, helpers need to be arduous, and skilled to proceed quickly and precisely, preventing that kernels drop to the ground. Lacking strong and skilled labor, a combine harvester renders the seasonal return of migrants unnecessary.

In Yuemei's case, her parents decided to rent Hugen's harvesting service while her mother was the only left-behind. The missing strong and skilled labor due to migration was one decisive factor. Other factors include that Yuemei's household had four members with the skills of surviving and earning enough income in the cities to afford the service. Moreover, her parents are able to evaluate the efficiency of a combine for their fields: a combine is cost-efficient only for a total area bigger than one *mu*, hence the size of the total cultivated area played a role. Concerning the size and soil quality of the individual fields, the machine destroys the carefully constructed ridges needed for irrigation in a small field, whereas in muddy soil it gets stuck. Besides, the potential need of rice straw that gets lost when using a combine has to be calculated. Having no straw implies lacking the common material for fire making, cooking, sleeping mats, and for feeding the ox. The latter entails having to replace the ox by modern plowing machinery, and hence assessing the implications of this technological change, too.

Further investigation is needed to reveal if the particular perception and hierarchical ranking of farming techniques and technologies also constitute a decision making factor, and how this relates to different villagers' worldviews. Data suggest that in Green Water (as in official policy discourse) mechanized farming is positively perceived as modern, whereas manual techniques are negatively associated with backwardness, especially by the young. In contrast, elder experienced farmers seem more aware of their own manual farming skills, which they clearly do not concede to the post-1960 generations.

Generally, it is remarkable that with regard to both transplanting and harvesting, old and new techniques and technologies do not replace one another, but co-exist by being employed strategically – among others, on the basis of related skills.

### Fields and migration

Both of the examples, the replacement of transplanting by broadcasting and of sickles by a combine harvester, are part of migrant households' strategies to preserve valuable

fields. In both, labor is replaced by labor-saving techniques and technologies, although not necessarily by modern ones. Importantly, this strategy still allows double-cropping.

The same is possible if migrants return seasonally, a strategy practiced by Hugen. He combines his own farming activities with selling his services as a competent combine driver and owner. In contrast, Meijuan and her husband who run a small renovation business in Guangzhou have the social skills and networks to organize strong labor upon their seasonal return and to farm an area four times larger than that of other migrant households.

More commonly, though, migrants do not return seasonally. If no household members stay behind, fields are often subcontracted to commercial farmers. This strategy is pursued by teacher Liu. After moving to the county seat, he subcontracted his fields to preserve their value.

If there are left-behind, they frequently switch to monocropping, as in the case of Huiqing and his wife. In their absence, his mother rears his children, his father tends the fields, obtaining one subsistence harvest.

Another common left-behind's strategy is to use good quality land for cultivating less labor-intensive cash crops. An example is lamp rush, a traditional local crop that grows in (and preserves) wet fields. After 1949, its usage was denounced as superstitious and rush lamps were replaced by electricity (CCACG 1996: 295). Yet, today lamp rush has revived as an ideal cash crop for elderly left-behind, such as Granny Li. Easy to cultivate, the processing (drying and peeling) requires her great dexterity and patience. The product is sold for cushioning mats and coffins.

Bad quality land is often converted into dry land for planting non-grain subsistence crops. At the basis of this decision is also the close acquaintance with the different fields, their varying soil quality and the requirements of particular crops.

Abandoning fields and non-agrarian activity are forbidden and may be fined. Yet, occasionally both happen. In the nearby market town, residents leave their fields desolate to rely on craft and trading skills instead. Fields can also become building land, another valuable resource in view of men's increased marriage chances through new houses.

The listed strategies may be combined or adjusted. Similar strategies have been observed in other countries with off-farm migration (see Murphy 2002: 73). Still, the Chinese context is particular: on the one hand, after the relatively

equal redistribution of land, hiring labor is not common, and migration is usually not motivated by the pressure to buy farm land (ibid.: 72). On the other, converting wet into dry or building land, and abandoning fields are long-term decisions, due to the difficult reclamation of the land for rice farming. The outcomes need to be skillfully assessed.

## Conclusion

The ethnographic examples focused on strategies employed to preserve valuable rice fields in light of rural emigration. The choice of the strategies requires a set of skills and knowledge.

On the one hand, general rice farming skills are needed. Being present in all Green Water households, these skills are basic for decision-making. They range from acquaintance with the soil quality, dexterity in transplanting, and arduous careful manual harvesting, to organizing labor at peak times, and estimating the outcomes of technological choices.

On the other hand, particular skills of individual household members need to be considered. In Green Water, these are distributed unevenly along gender and age lines. Influenced by an ideal division of labor, men ought to have the bodily abilities for plowing or harvesting. Women should excel in patience and manual dexterity, needed for transplanting or processing certain cash crops. As opposed to the young, the elder had more exposure to farming and they are familiar with traditional and modern farming techniques. Moreover, some household members have additional skills such as particular craft, trading, or business knowledge, the ability to gain most out of social networks, or even a university degree. Persons skilled in these latter fields are typically migrants.

When taking strategic household decisions of rice field preservation in a migration context, households do not only take economic and other factors into account – such as the effects of the one-child policy; available land; immediate expenses for weddings, funerals, or the education of children; other activities, crops, and strategies of risk aversion; or the return to the countryside, because of wedding, childbirth, or failure in the city. Importantly, the demographic constitution of migrant and left-behind household members and their particular skills also play a role, e.g., if there is only an elderly couple left-behind, it may opt for growing and processing the cash crop lamp rush, which requires the experience and dexterity of an old woman. Or else, particularly marketable skills of migrant household members (e.g. skills in construction; a university degree) may grant more options for affording to rent a combine harvester that ensures the preservation of the field in the absence of skilled labor.

Hence, as I hope to have shown and will elaborate in my thesis, the investigation of skill-scapes allows further insights into farmers' strategic decision making, revealing them as skillful agents, instead of victims in difficult circumstances. Hereby, the lens of skill may contribute to elucidating the current great economic, technical and social transformation processes of the Chinese countryside.

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