

### 14

### Pluriactive and Plurilocal: Young People's Pathways Out of and into Farming in Kulon Progo, Yogyakarta, Indonesia

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In this chapter we explore young people's spatial and sectoral mobility, specifically their trajectories out of and into farming, in the Javanese village of Kaliloro, focusing on young men and women from small-farm and landless families who make up the majority of the population. The study is based on field research in Kaliloro in 1972–1973, 1999–2000, and 2016–2018 and thus provides the opportunity for an analysis with some historical depth.

Our main data sources are as follows:

1. Household surveys covering all households in 5 of the village's 26 neighbourhoods in 1973 (411 households), 2000 (473 households), and 2017 (519 households).

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- 2. Sample surveys of about 50 small-farmer and farm-worker households in 1973, 2000, and 2018.
- 3. Detailed time-budget studies from 20 small-farmer and landless households covering a one-year period and all children and adults from age four and up (1973 and 2000). A detailed study of time allocation is highly labour intensive (involving the recording of several thousand person-days of time use, even in a small sample of 20 households) and also highly intrusive on the private lives of those we study. For both of these reasons, time allocation research was not repeated in our most recent field study.
- 4. Qualitative interviews with 35 "young" farmers and smaller numbers of older farmers in 2017–2018, focusing specifically on the trajectories out of and into farming that are the main focus of the second half of this chapter.<sup>1</sup>

The chapter is organized as follows. In the next section, we present a snapshot of Kaliloro in 1973—in the early years of the Suharto period and of Java's "Green Revolution"—focusing on agrarian structure and livelihoods. We then summarize the main changes in infrastructure, education, and livelihoods in the four decades since 1973. We then describe the general (and quite dramatic) changes in the lives of young people in the same period, before focusing specifically on young men and women's contemporary trajectories out of and into farming.

#### Kaliloro in the Early 1970s<sup>2</sup>

The village of Kaliloro<sup>3</sup> lies about 30 kilometres to the northwest of the city of Yogyakarta in southern Central Java. It lies on a thin plain of rice terraces and settlements some two kilometres wide between the foothills of the Menoreh mountain range to the west and the Progo River to the east (Fig. 14.1).

<sup>&</sup>lt;sup>1</sup>Thanks to Aprilia Ambarwati and Charina Chazali who joined us in conducting these interviews.

<sup>&</sup>lt;sup>2</sup> Sources for this section are White (1976a, b) and Stoler (1977).

<sup>&</sup>lt;sup>3</sup>The name is a pseudonym, as are all names of persons mentioned.



Fig. 14.1 Central Java and Yogyakarta, showing the location of Kaliloro

It is a large village, the result of fusion of five smaller villages in 1946, with about 2800 households and 10,500 people in 2017. It shares the basic features of many densely populated rice-growing villages in the Yogyakarta and Central Java region: widespread landlessness, high tenancy rates (mainly share tenancy), extremely small average farm sizes, intensive cultivation practices, a high degree of pluriactivity (multiple income sources) in both rich and land-poor households, relatively high levels of education in the current generation (with most boys and girls now completing secondary school, even in poor households), and high out-migration rates of these relatively well-educated young men and women. We further explore these features below.

Since 1968, year-round irrigation became available from the large-scale Kalibawang canal, which snakes through the village along the lower edge of the Menoreh foothills. Despite quite frequent breakdowns in the early years, during 1968–1973 most farmers were able to plant a second (dry season) rice crop.

#### **Land Ownership and Access**

In the five of Kaliloro's 26 neighbourhoods surveyed in 1972, almost 40 per cent of households owned no rice fields (*sawah*), and a further 23 per cent owned less than 0.1 hectares (ha); this group (62 per cent of households) between them owned less than 10 per cent of all the land. At the other extreme, the top 6 per cent of households with holdings of more than 0.5 ha owned more than half of all the sawah (see Table 14.1).

Operated holdings of sawah (= farm sizes) were somewhat more equally distributed than ownership due to tenancy and particularly sharecropping: 30 per cent had no rice farm and a further 20 per cent had farms of less than 0.1 ha. Between them (half of all households), they farmed only 9 per cent of the total area farmed. At the other end, only 4.4 per cent of households farmed more than 0.5 ha, between them controlling about 24 per cent of the total farm land under cultivation (Table 14.2). Farm size distribution was thus also unequal, but more equal than ownership, due to the

Year	1972		2017	
	% of all	% of all	% of all	
Area owned (m²)	households	sawah	households	% of all sawah
0 (none)	38.6	0.0	50.1	0.0
1–1000	23.3	8.6	28.3	23.2
1001-2000	21.1	18.6	13.7	28.7
2001-3000	4.9	7.0	3.3	11.1
3001-5000	5.8	13.6	2.1	10.9
>5000	6.3	52.3	2.5	26.0
Total	100	100	100	
All households	(411)		(519)	
Owner households	(253)		(259)	
Average area owned	0.17 ha		0.08 ha	
(all households, owners only)	0.27 ha		0.15 ha	

Table 14.1 Ownership of sawah, 1972 and 2017

Source: Authors' own household surveys, 1972 and 2017

<sup>&</sup>lt;sup>a</sup>The sample for Tables 14.1 and 14.2 comprises all households in 5 of Kaliloro's 26 neighbourhoods (*dusun*). For the purposes of this table, "ownership" includes both owned land, *tanah bengkok* (village-owned salary lands allocated to village and neighbourhood government officials for the duration of their term of office) and *pengarem-arem* (allocated as pension after completion of their term of office)

Area operated (m²)	Number		% of all households	
Year	1972	2017	1972	2017
0 (none)	122	252	29.7	48.6
1–1000	82	127	20.0	24.5
1001–2000	111	81	27.0	15.6
2001–3000	38	28	9.2	5.4
3001–5000	40	22	9.7	4.2
5001–7500	18	9	4.4	1.9
Total	411	519	100	100
Total rice farmers	289	267		
Average farm size (ha)	0.21	0.17		

Table 14.2 Area of sawah cultivated (operated farm size), 1972 and 2017

Source: Authors' own household surveys, 1972 and 2017

Table 14.3 Tenure status of rice farmers, 1972 and 2017

	1972	2017
Status	%	%
Pure owner-operator	54.3	40.3
(Part) share tenant	15.6	22.4
(Pure) share tenant	21.5	31.0
Rent/mortgage	4.8	4.9
Combination share tenant and rent	3.8	1.5
Total	100	100

Source: Authors' own household surveys, 1972 and 2017

prevalence of tenancy: 46 per cent of farmer households were cultivating land that they did not own, or only partly owned, nearly all under share tenancy agreements (Table 14.3). Average sawah ownership was 0.17 ha (among all households) and 0.27 ha among owner households. The average size of sawah farms (counting the farm households only) was 0.21 ha.

With such tiny farm sizes, it is not surprising that pluriactivity—diversification of occupations and income sources at the household and often also at the individual level—was already quite striking in 1973. There were very few households, rich or poor, for whom income from rice cultivation, or the time devoted to it, constituted a major part of the household's total productive activity. Households in all land-owning strata engaged in nonfarm activities, but for different reasons. A detailed, year-long study of incomes and work in 20 small-farm and landless households found that

only 27 per cent of their incomes were derived from sawah cultivation and 19 per cent from home gardens (*pekarangan*), with the remaining 54 per cent deriving from off-farm work (agricultural wages) and non-farm work. One characteristic feature of such non-farm work was that it provided, on the whole, lower returns per hour of work than own-farm production or agricultural wage labour (White 1976a, b). Some non-farm activities have declined or disappeared in previous decades. *Batik*-making on a putting-out basis for Yogyakarta merchants had completely disappeared since the 1930s recession; home-based handloom weaving still employed some 40 people but was on the decline. Other activities, however, had increased, notably bamboo and pandanus-mat weaving as well as petty trade. More than one-quarter of all adult women were involved in some form of trade, and another 10 per cent in production of food for sale.

More women than men were involved in agricultural wage labour, but as a secondary activity for the majority of those involved; this reflects the highly seasonal nature of agricultural wage employment for both men and women and the consequent necessity of other sources of income besides farm labour. The hand-pounding of rice as a source of wage income for women had recently disappeared after the introduction of rice hulling machines in the late 1960s. Rice harvesting, in contrast, still used the traditional finger knife (*ani-ani*) and was a major source of income for women in small-farm and landless households (Stoler 1977).

During the 1960s and the 1970s, population growth in the village was not significant, not because of low birth rates but because of high outmigration rates. Out-migration, nearly exclusively of young adults, has been a constant feature of village life for several generations. In the late colonial period, many young men and women left for working in plantations in North Sumatra or to pioneer settlement regions of Lampung and South Sumatra.<sup>4</sup> In 1972, among the children of Kaliloro residents who had already left the parental household, 55 per cent had left the village and the great majority of these had moved outside the district, with 103 (22 per cent) having moved to destinations outside the

<sup>&</sup>lt;sup>4</sup>Kaliloro has a long history of migration to Sumatra since the contract labour and colonization schemes of the 1920s and 1930s. One resident of Kaliloro was a professional labour recruiter for Sumatran plantations during that period. After independence, the presence of established kin in Sumatra made it easy for young people to move there without government assistance (White 1976a, 356).

Location	1972 %	2000 %	2017 %	Note
Kaliloro	45	27	32	
Outside Kaliloro, Yogyakarta region	7*	12	19	*1972: Kulon Progo district only
Other region in Java	26	41	37	-
Outside Java	22	20	14*	*includes 0.5% (3 persons) overseas (Malaysia, Taiwan)
Total	100	100	100	

**Table 14.4** Indicators of out-migration, 1972, 2000, and 2017. Location of all sons and daughters of current residents who have left the parental household<sup>a</sup>

Source: Authors' own household surveys, 1972, 2000, and 2017

island of Java (Table 14.4). These movements all represent the period before the rapid expansion of labour-intensive, export-oriented manufacturing in the late 1970s that drew many teenagers and young adults, particularly women, into the textile, garment, and footwear industries of West, Central, and East Java (Mather 1983; Wolf 1992).

## Changing Village Economy and Livelihoods, 1973–2017

Returning to Kaliloro in 1999–2000, and again in 2016–2018, some of the most obvious changes are the following.

The population has grown modestly (by only 23 per cent in 46 years), with the number of households growing faster (by 40 per cent) and average household sizes falling from 4.3 to 3.7.5 The city has come closer to the village, in many ways. In the 1980s, a new bridge across the Progo River, a few kilometres to the south of Kaliloro, reduced the distance and

<sup>&</sup>lt;sup>a</sup>This table shows, for all resident adult women, the current location of any of their children who now reside outside the parental household. Only children of resident women are counted to avoid possible double-counting in cases of men who are divorced and remarried

<sup>&</sup>lt;sup>5</sup>These numbers derive from village-level statistics. In the five neighbourhoods covered in our own household surveys, the number of households grew by 26 per cent (from 411 to 519) between 1972 and 2017.

travel time to Yogyakarta. In 2015, a new bridge was opened in Kaliloro itself, cutting the distance and travel time again by about 40 per cent. Daily commuting to Yogyakarta, though still rare, is now a possibility. The improvement and widening of the asphalt road and various bridges along it, and a big increase in the frequency of public transport, have made Kaliloro's main north-south road a busy thoroughfare. The quality of smaller roads and concrete pathways entering residential areas has also greatly improved. In 1973, there were only a few motorcycles and one four-wheeled motor vehicle in Kaliloro. The main mode of local transport for people and goods was by foot and bicycle, and several people kept small packhorses for the transport of goods. By 2000, the horses had disappeared, replaced by 34 private cars and minibuses, 45 trucks (most of the latter owned by one person), and almost 300 registered motorcycles. In 2019, there are so many motorcycles that the officials no longer keep a register.

Around Kaliloro market and in other parts of the village are many new shops, kiosks, and food stalls with a wider variety of goods for sale. At the village's main crossroads and near the marketplace, there are now about 130 offices, shops, and small businesses, including several banks and credit providers, six photocopy shops, two motorcycle dealers, a laundry, a notary's office, and a pharmacy as well as more than 50 shops of various kinds and more than 30 small food stalls (*warung*) offering a variety of foods.

The quality of housing is also much improved. Houses with wooden frames and woven bamboo walls (*gedek*) are now quite rare and most landless or near-landless households have been able to build brick houses with the support of reciprocal labour, in combination with some hired craftsmen (Abdullah and White 2006).

Kaliloro was connected to the State Electricity Company grid in the mid-1980s, and by 1999, 90 per cent of households surveyed were connected, officially or not. Besides the replacement of oil lamps with electric light, electrification has made possible various other innovations such as the two busy photocopy shops near Kaliloro market, the desktop computers and laptops in the village office and in some private households, commercial laundries using washing machines, "play-station" booths along the main road as conduit for the pocket money of school children

and unemployed youth, and of course the enormous increase in the number of television sets. Since the first village-owned set was installed in front of the village office in 1974, more than half of the households that we surveyed in 2000 had televisions at home and, by 2017, virtually all households had one. In the early 1970s, there was no telephone of any kind in the village; by 2000 there were a couple of public telephones, and by 2017, the great majority of households had at least one mobile phone.<sup>6</sup>

Small-scale piped water (PAM) projects have brought running water to many houses on the eastern side of the river and to some on the western side; 20 per cent of our surveyed households had running water. Besides reducing the time spent in fetching water (from their own or nearby wells or from streams), running water has also made possible the irrigation of home gardens and the construction of year-round fishponds in many hamlets.

Since the early problems of the irrigation channel were overcome in the mid-1970s, regular double-cropping of rice has been assured. A rigid regime of water supply and crop calendars has made a tightly scheduled crop cycle of paddy-paddy-polowijo<sup>7</sup> universal. Improved irrigation, relatively high levels of inorganic fertilizer application (around 250 kilogrammes per hectare), improved pest control, and some improved practices<sup>8</sup> have brought paddy yields to about twice their earlier levels, that is, between 5 and 6 tonnes of barn-dry paddy per ha (or about 3.5 tonnes of milled rice). In pre-Green Revolution times, a rice farm of 0.2 ha was needed to provide an average-sized household with enough rice to eat in a normal year. In 2019, a small plot of 0.1 ha can provide about 0.7 tonnes of milled rice per year, more than the food requirement of a family of four or five persons.

Paddy tractors have replaced buffalo-drawn ploughing or hand hoeing on most of the *sawah*, thus reducing opportunities for male wage labour.<sup>9</sup>

<sup>&</sup>lt;sup>6</sup>The exceptions are a few elderly individuals or couples who do not have their own electricity supply.

<sup>&</sup>lt;sup>7</sup> *Polowijo* crops are the rainfed cash crops of soya, groundnuts, mung beans, and so on. Some farmers leave their fields fallow in the polowijo season.

<sup>&</sup>lt;sup>8</sup> Straight-row (*sipatan*) planting, which a few farmers were using in 1973, is now universal. Some farmers now use urea fertilizer tablets in place of loose powder.

<sup>&</sup>lt;sup>9</sup> Exceptions are terraces too small or too steep to allow tractor access.

The tight cropping calendars, with all farmers planting within a few weeks, have made the peaks of labour demand in transplanting and harvesting higher but also shorter in duration. Agricultural wage employment is therefore both more female and more seasonal than previously. In harvesting, sickles have replaced the ani-ani and husband-wife couples are often seen harvesting together in what was previously exclusively women's and girls' work. A more important change, however, is that much of the paddy produced in Kaliloro is now sold as a standing crop to penebas<sup>10</sup> who bring in their own teams of harvesters from outside the village. This is true for a majority of farmers in the first (rainy season) harvest, and smaller but still significant numbers in the dry-season harvest. Penebas pay their harvesting teams a wage reportedly of between 1/10 or 1/12 of the amount harvested. On the remaining plots where "normal" bawon<sup>11</sup> harvesting is practised, the stratified system of bawon payments that Stoler described in 1977 endures: neighbours are often paid one-sixth (and with sickles, can now harvest up to 150 kilogrammes per day, thus earning some 30 kilogrammes of paddy), and while most farmers told us that they pay not less than one-eighth, harvesters from hamlets in the western part of the village told us quite definitely that they receive only one-tenth when they harvest for farmers from the eastern part (Abdullah and White 2006).

By 2000, a few farmers had begun cultivating watermelons on sawah, an intensive crop grown on plastic sheeting, demanding much greater inputs of capital than polowijo and requiring daily attention, and providing greatly increased profits if it is a successful harvest. Small numbers of farmers had shifted to high-value vegetables (chillies, tomatoes, etc.) on part of their sawah; these are mainly younger farmers, as we will see later.

In spite of all of these changes, the overall pattern of distribution of (sawah) landholdings changed little between 1973 and 2000—ownership had become slightly more unequal and the landless and near-landless (less than 0.1 ha) groups had grown faster than others. Changes in landholdings seemed to have accelerated, however, during the post-Suharto

<sup>&</sup>lt;sup>10</sup> *Tebasan* is the sale of standing rice crops in the field, negotiated shortly before harvest time. The buyer (*penebas*) pays in cash and brings his/her own team of harvesters.

 $<sup>^{\</sup>rm 11} \textit{Bawon}$ : the harvester's wage, paid in kind as a proportion of the crop she/he has harvested.

years (2000–2017). Table 14.2 suggests that both centrifugal (differentiating) and centripetal (levelling) tendencies are at work: there are fewer owners in the largest size categories, but at the other end, greater numbers with no land or less than 0.1 ha. Less than half of all households now own sawah land (Table 14.1) and only 52 per cent operate a rice farm (Table 14.2). Half of all rice farms are now less than 0.1 ha in area and there are no farms larger than 1.0 ha (Table 14.2). Tenure statuses have also shifted, with the numbers of rice farming households owning none or only part of the land they cultivate rising from 46 to 57 per cent. Moreover, over half of all land is now cultivated by a tenant rather than its owner and nearly all of this land is operated on a share tenancy basis (Table 14.3). There is thus an increasing tendency for land owners with a large amount of land not to become farmers themselves, but to parcel out their land in small sections to sharecroppers; the small (or micro-)farm pattern remains, as in other regions of Java (White 2018). The average size of rice farms has declined from 0.21 to 0.17 ha. This should not, however, be seen as indication of immiseration, as a farm of 0.17 ha now produces much more than a farm of 0.2 ha previously. The village now produces a surplus of rice above its own requirements. However, due to unequal access to land, only one-third of households were self-sufficient in rice in 1999-2000 and one-third had to buy rice for more than half of the year.

#### **Occupations and Pluriactivity**

Changes have also occurred in non-farm activities, which continue to provide a substantial portion of livelihoods for both richer and poorer families. Brick making was formerly a common activity, beginning after the rice-planting season, and involving men, women, and children; the bricks were either sold or used to build or expand a family's own home. This household-based brick making is no longer found in Kaliloro; it has been replaced by small breeze-block (*batako*) industries, using simple machinery and employing three or four local male workers.

Two other formerly common non-farm activities in poorer house-holds—the tapping of coconut trees and making of palm sugar (gula

Jawa) and weaving pandanus mats (tikar pandan)—have not completely disappeared but are found in only a few households and involve elderly people in their 70s or 80s. A few households have shifted to making dried reed (mendong) mats with materials that have to be purchased at the village market, but mat weaving is still (as it was in the 1970s) one of the activities with the lowest incomes per hour of work. Many women in their 30s and 40s have recently begun weaving laundry baskets for export, or a putting-out basis, collecting the raw materials from the (male) exporter in the neighbouring district. They are expected to meet a target of ten completed baskets in two days. They receive IDR 4000 (US\$0.30)<sup>12</sup> per completed basket, which provides an income of about IDR 2000 (US\$0.14) per hour, or less than one-fifth of the hourly wage for agricultural (transplanting) work.

In the 1970s, 1980s, and 1990s, many young women in their 20s and 30s still worked as farm labourers (transplanting, weeding, and harvesting). In recent years it is now mainly older women (age 40 and above) who are found in this work (Wijaya 2016). Younger women prefer to work in the various factories that have appeared within easy commuting reach of the village (producing, for example, women's underwear, bags, wigs, and handkerchiefs) and where they can earn between IDR 700,000 and IDR 1,200,000 (US\$50 and US\$86) per month. Others find work in the growing number of local shops and food stalls or as nannies or housemaids in the homes of their wealthier neighbours. For men, there have been fewer shifts in the kinds of work available and the majority work in construction or in small-scale animal husbandry.

Meanwhile, the richer households in the village have profited from developments in village infrastructure. We found four wealthy people active in the contracting business. They established contracting companies to tender for infrastructure projects including construction/repair of roads and public buildings and so on. They also rent out construction equipment and supply construction materials and workers. While there are some "new rich," most of the village's current economic elite are descendants of the old village elite, particularly the descendants of Kaliloro's five pre-1946 village heads, who own extensive residential and

<sup>&</sup>lt;sup>12</sup>US\$1 is approximately 14,000 Indonesian Rupiah (IDR).

home-garden (*pekarangan*) land in strategic locations near the main road. Today's elite occupy positions in village government as civil servants or are businessmen/women. Others have built rows of "kiosks" along the main road for rental or opened shops that hired workers staff. Others are active in agribusiness, including some medium-sized poultry farms with hundreds or thousands of birds or sales of farm inputs and animal feed. Another avenue of accumulation is the purchase of pekarangan in their own neighbourhoods, for rental or resale as the value rapidly rises. <sup>13</sup> The sons and daughters of these wealthy families generally complete tertiary education and hope to join the civil service, armed forces, or police. When parental land becomes available, they will generally not become farm managers themselves but parcel out the land to tenants.

#### **Changing Lives of Young People**

Look, when we were children [in the 1920s] we used to run around naked—now the children all wear clothes and go to school and are able to do household chores by the time they are eight years old. (An old man reminiscing, 1972)

Nowadays in the afternoon or evening after school the children rarely help their parents, they spend their time watching TV. (Primary school teacher, 1999)

### The Prolongation of Childhood and the Emergence of Youth<sup>14</sup>

The prolongation of childhood (or "postponement of adulthood") in rural Java is a largely post-colonial phenomenon, resulting from more general and longer schooling, increasing age at marriage, and postponed

<sup>&</sup>lt;sup>13</sup>The rising price of both farm land and residential land is an Indonesia-wide (and indeed, world-wide) trend, further accelerated in this region by the construction of a new international airport in the southern part of Kulon Progo district, and increasingly busy traffic on Kaliloro's main road, which is now part of a designated agro-tourism (agro-wisata) route.

<sup>&</sup>lt;sup>14</sup>This aspect is analysed in greater detail, based on the results of time-allocation studies carried out in 1972–1973 and in 2000, in White (2012).

entry into labour markets. In the half-century since independence in 1945, each successive generation in Kaliloro has reached progressively higher education levels. While almost one-third of boys and four-fifths of all girls born in the 1920s and 1930s had no education at all, the numbers of children not receiving any education among those born in the 1950s were small for girls and insignificant for boys, and by the 1970s—despite widespread poverty—virtually all children attended primary school and many continued to lower secondary school (SMP). More remarkably, among those born in the 1970s (the early years of the Suharto regime), nearly all continued on to lower secondary school and around four-fifths (slightly more for boys, slightly less for girls) entered upper secondary school, thus continuing their education beyond the age of 15 at which compulsory education in Indonesia now ends. By 2017, nearly all the children born around the millennium—today's teenagers—are attending upper secondary school (SMA or SMK).

This has had important implications for the involvement of young people in work. A comparison of teenagers' time-use shows important changes between the early 1970s and the next generation in the early 2000s (White 1976b, 2012; White and Margiyatin 2016). In the early 1970s, both work and school were considered a normal and proper part of growing up. Virtually all children attended six years of primary school until completion, while more boys than girls attended junior secondary school (often stopping at age 15). Formal education, however, had not yet become disruptive of children's work involvement. Boys and girls of primary school age (6-12) and secondary school age (13-18) made significant contributions in both directly productive and domestic work. Boys and girls aged 6-12 worked for an average of around 30 hours per week; when hours in school are added, they were busy with work and school for around 50 hours each week. For teenage boys and girls, the gender differences were pronounced: boys spent 39 hours per week in work and a total (work and school) of 58 hours per week, while girls worked for 73 hours per week (as much as their mothers) and were generally no longer in school. Among landless and small-farm households, children contributed more than half of all working hours. Only a minority of these working hours were in agriculture; the importance of children's work lay mainly in their contributions in domestic work, firewood collection, animal care and feeding, and (for girls) handicrafts—all necessary tasks in which their contributions freed the labour of adult men and women to engage in agriculture (own farm and wage work), trade, and other activities directly productive of income. Most children in landless and land-poor households had experience of wage work and/or homebased work such as handicrafts, which generated cash income, which the children often used to provide for their own needs, such as clothes, school fees, snacks, and tobacco.

By 2000—a generation later when these children were adults and had their own children—education up to age 15 had become virtually universal and the majority of both boys and girls aged 16–18 attended upper secondary school; their education (attendance, travel, and homework) occupied increasingly more of children's time. Hours of "real" work had correspondingly declined, and this sometimes became a source of tension between parents and children, although the common parental complaint that children don't help their parents any more is an exaggeration. In the 13–18 age group, boys were still contributing 18 hours per week and girls 27 hours per week in various kinds of work, although both boys and girls were spending an average of close to 40 hours per week—which in the West would be regarded as a full-time activity—in school attendance and homework.

While children's work on the farm was not essential, both boys and girls still went to the rice fields at busy periods, particularly at harvest time. During our latest restudy in Kaliloro (2017–2018), however, we have found that today's teenagers are the first generation who, in many cases, have literally never set foot in their parents' rice fields; the process of deskilling and alienation from farming is well advanced.

The potential rupture in the regeneration of farmers and farm workers has various causes, including the increasing length of time spent in school and changes in young people's ideas and lifestyles as they engage increasingly with the outside world through the internet and social media. As already mentioned, nearly all children, including those of poor farmer and landless households, now complete secondary school. Many opt for vocational school in the hope of quickly finding work once they graduate. Lower and upper secondary school students don't get home until 3 or 4 pm and still have homework to complete. This affects not only the time

they can spend helping at home or in the fields, but also the way that they think about themselves and their surroundings.

Nearly all secondary students in Kaliloro have access to a smartphone and social media accounts. This allows children and youth to bypass the old adult and adult-provided filters through which young people formed their ideas about the outside world (parents, school, religious teachers, the radio, and occasional newspapers). Nearly all of the young people that we have met during our study are active on social media (mainly Facebook and Instagram) and spend their free time in activities that have nothing to do with farming—enacting modern youth lifestyles. Once they have finished school, they hope to attain jobs in other sectors. Their parents seem aware of the changes that the new generation of teenagers are experiencing.

Formerly, there wasn't much for children to do to amuse themselves. Now there are lessons, internet, gaming, all kinds of things to keep them busy. So they can no longer help their parents in the sawah, as I did in my childhood. (Kukuh, 38, who farms land belonging to his father and an uncle)

Ya what can be done? Kids today don't want to go to the sawah. Times have changed... maybe the generation of the 70s would go to the sawah, but today's kids run off to the factories. (Santoso, a 44-year-old share tenant)

Even those children who opt for the agriculture stream in vocational school generally hope to secure a factory job, as some local SMK teachers told us; less than 5 per cent of SMK agriculture graduates, they said, go into small-scale farming. But—and this is important in view of arguments that we will make later—one reason for this, they say, is that these young men and women don't have any prospect of access to a plot of land to cultivate themselves: "most of the children in this school come from sharecropper or landless worker families." The objective of an SMK education in agriculture, they say, is to produce graduates ready to take their place in the (agri-related) labour market. This is why the school has developed links with various oil palm plantations in Kalimantan and Sumatra as well as with an agricultural machinery company in Yogyakarta. But most SMK agricultural graduates, one teacher explained, find jobs in factories or shops. There is also another reason for the choice of agricultural

vocational school, as a small farmer explained: "my daughter chose agriculture because it's cheaper than computer technology."

One small farmer's daughter attending the local agricultural SMK explained why she had no plans to become a farmer: as a farmer, it would be very difficult to make her family better off than it is at present, given all of the problems of small-farm size, risks of harvest failure, and low prices of farm produce. A steady job in a factory or some other business would be better, with a fixed monthly salary.

Most of today's teenagers do not see their future in farming, wanting to work outside of agriculture and outside of the village. What is less often understood is that this was also the case of many of their parents (the current generation of older farmers) and grandparents; aspirations are not a reliable guide to actual futures. As shown in previous sections, for at least three generations young people have "voted with their feet," moving to far-away destinations in search of employment. Out-migration (which, as seen above, was already common in the early 1970s) was even more prominent by 2017. As shown in Table 14.4, of all the children of current residents who had left the parental household, only one-third are still resident in Kaliloro. While some (19 per cent) remain close by in other villages in Kulon Progo district, the majority (51 per cent) have moved to other parts of Java or have left Java. What we do not know from these survey data is how many of this stream of migrants later return to the village and to farming; certainly, there are many migrants who have returned while still in their young adulthood (mid-20s and 30s) to take over land from their parents when it becomes available. This pattern continues today, as we will explore in more detail in the next section.

## Pathways Out of and into Farming: Becoming a Young Farmer

Among the 35 young farmers—male and female—whom we interviewed, 15 we found both similarities and differences in their migration histories, the reasons they decided to become farmers, mechanisms of

<sup>&</sup>lt;sup>15</sup>Aprilia Ambarwati, Charina Chazali, and Hanny Wijaya conducted these interviews.

intergenerational land transfer, crops planted, off-farm activities, and their involvement in farmers' groups. In this section, besides some general observations, we will present seven contrasting individual cases to illustrate the variety of pathways out of and into farming.

Almost all of these respondents came from landless or small-farmer families. Only one woman, who controls 1.1 ha of land, is a village official from an elite background. The others cultivate farms between 500 and 6000  $\rm m^2$  (0.05–0.6 ha), mostly as tenants renting or sharecropping the land, whether from their own parents or other owners. One other exception is a young man who owns only 400  $\rm m^2$  himself but sharecrops an additional 1.0 ha belonging to an owner who lives outside the village.

The majority of our respondents, both male and female, have a history of migration to the Jakarta region (Tangerang, Cikarang, Bekasi), Sumatra (Riau, Padang, Jambi, Batam), Kalimantan, or Malaysia after completing secondary school. Most of those migrating to Jakarta or Batam found jobs in factories (textile, footwear, dolls, automobile parts, machine assembly). Most of those who went to Sumatra or Kalimantan worked on oil palm plantations, while those who went to Malaysia worked in construction, except one who worked on a large-scale watermelon farm. Most of them reported using their wages for daily needs and savings for the future; only a few reported sending money home to their families in the village. Many of them used the services of a broker, both for travel and for finding work, while others were helped by relatives, friends, or neighbours who had gone before them. They also mentioned a variety of reasons for their decision to return to the village: expiry of their labour contract, not feeling at home in the city, to get married, or to care for ailing parents.

We only found three young farmers among the 35 who had no previous migration history, and only two of these had turned to farming as soon as they left school (the third remained in the village but doing nonfarm work before turning to farming). The kinds of jobs available locally to school leavers who don't migrate include working in shops or restaurants, various kinds of casual labour, motorcycle taxi (*ojek*) driving, and in recent years, employment in the various manufacturing industries that are now within commuting distance from the village.

One of these "early continuers" is Yanto, who was 21 years old at the time of the interview.

Yanto, a young bachelor, lives with his father, grandfather, and two younger siblings. Since completing lower secondary school at about age 15, he has helped his father in the sawah and with collecting stones from the river bed. His mother died when he was still in lower secondary school and he felt an obligation to help with father in his rice fields. Presently, Yanto has 500 m² (0.05 ha) of sawah, inherited from his mother and registered in his name. His mother bequeathed all of her sawah to Yanto; his two younger sisters are still in (junior secondary and primary) school. Having such a small holding, his mother's main reason for leaving him all of her land was in consideration of who was most capable of using it productively and keeping the land in the family. During his childhood and adolescence, Yanto regularly helped his parents with farm work, and his mother saw that her son was more likely to become a farmer than his sisters.

He also helps his father with hoeing, weeding, and harvesting on the 1200 m² of sawah that he sharecrops from a relative. On his own land, Yanto uses a different crop mix than his father. Besides the usual rice and polowijo crops, he often plants chillies and vegetables. He explained that these are crops that bring in money, as their own family's rice harvest is not sold to a penebas but harvested for the family's consumption. For cash, he relies more on non-farm work; he looks after two cows, earns wages by transporting timber, and delivers manure to an organic fertilizer business. He uses the earnings to buy food for the family and to pay for his two younger siblings' school fees.

He says that he is happy to farm and care for animals. One reason is that he owns his own small plot of sawah, and another is that as a farmer, you are freer and more relaxed than a factory worker. "If you work in a factory and get sick or exhausted, you have to keep on working. But as farmers, we're free to manage our own time. If we feel sick or tired, we can just stop working for a while."

One main challenge that farmers face, says Yanto, is the low prices that they receive for their produce. Chillies and vegetable prices, for example, are low and unpredictable, which, he says, dissuades most young people from taking up farming.

A second case of a younger person who started farming as soon as he left school is Budiman, who is 31 years old and still single.

Budiman began farming when he was 18. His father owns 2000 m<sup>2</sup> (0.2 ha) of sawah in two separate plots. Part of it is planted in the traditional paddy-paddy-polowijo rotation, while the other is for horticulture (including chillies and vegetables). It was Budiman who suggested planting chillies and his father agreed; the father decided to plant the other vegetables, based on his experience as a transmigrant settler in Kalimantan in the 1990s. He decided to join the transmigration programme because they were promised 2.0 ha of rainfed (tegalan) land. The family stayed for only 10 years in Kalimantan, returning to Kaliloro because the father was often sick (some thought he was the victim of black magic). Since they returned, Budiman has helped his father on the farm; while they were away, a relative farmed the land. He is the only child living at home. His elder sister lives with her family in Sumatra and his younger brother died when still in secondary school. Budiman helps with all stages of farm work. A portion of their rice harvest is sold to a penebas, part is kept for home consumption, and all of their other crops are sold. Budiman gives all of the money from these sales to his mother. He says he has absolutely no problem with that, as the money is used for the family's needs, including his ailing father's medical care, food, electricity bills, and working capital for the next growing season. His mother also puts some money away as savings for future needs (including Budiman's marriage). When he needs money for himself, Budiman works for wages for other farmers on their land.

Budiman has managed the farm by himself for the past five years as his father is elderly and ailing. Budiman's father, although still the formal owner, allows Budiman to take all important decisions about its management. This is in contrast to many other young farmers, whose parents still retain control of both the land and decisions about its management.

Like Yanto, his decision to remain in farming was because he "feels he owns" the land that he cultivates, although it's still registered in his father's name. Budiman's future in farming is assured—he will inherit all of the land. His father (who was present at the interview) told us: "His sister is far away and won't be returning to the village. And she and her husband have their own land there." Budiman, however, quickly denied this,

saying that it's possible that his sister will get half of the sawah; only they would have to make an agreement about its use and the sharing of the proceeds of the harvest.

Most of our young-farmer informants said that when they cultivate their parents' land, they still have to give the parents a share of the crop (and if their parents are share tenants, the harvest has to be divided not two but three ways—owner, parents, young farmer). This makes it even more important to have non-farm income. One such case is Darmi, a 45-year-old female farmer who is a share tenant on her parents-in—law's land.

Darmi is originally from Wonogiri (in the next district). She left school after junior secondary, then migrated to Solo and later Jakarta, working as housemaid or in restaurants; she also worked for a time in a textile factory in Karanganyar. She moved to Kaliloro in 2000 when she married a local man whom she met when he was working in construction in Wonogiri. His parents own 500 m² of sawah. Although Darmi's parents also own a small amount of sawah, she said she had never helped them with farm work; her first experience of this was helping her parents-in-law to plant and weed. Her mother-in-law also encouraged Darmi to join her transplanting rice for wages.

About five years ago, Darmi began to cultivate her parents-in-law's land. Although she and her husband now do all of the work—the husband does the hoeing, Darmi does all of the rest—they still have to give half of the harvest (half of 350–400 kilogrammes) to the parents. Darmi does not sell her share but uses it for home consumption. For extra income, she does agricultural wage work and weaves bamboo mats (*tikar*) at home. Her biggest source of income, she says, is agricultural wage work. At harvest time, she can earn up to 100 kilogrammes of unhusked rice. Other income comes from her husband's wages as a construction worker. He also makes furniture (tables, chairs) to order and works in a neighbour's small furniture business. They also raise catfish (*ikan lele*) in a fishpond near the house.

Regarding the future of her parents-in-law's sawah, Darmi is rather worried. Her father-in-law, she told us, plans to give it to his daughter who lives in Jambi (Sumatra), as all of the four other children have already been given some pekarangan land. She also has doubts about this plan, as

her sister-in-law is unlikely to want to return home and farm the land. If the sister-in-law is indeed given the land, Darmi hopes to rent it from her. "What's for sure is that 500 m² of land can't be divided among six heirs—how much would each get?"

The uncertain prospect of land ownership makes Darmi push her two children towards other occupations. Her first daughter is working in an underwear factory in Sragen, a district in the eastern part of Central Java, while the second is still at vocational secondary school. "I hope my children won't become farmers and have the same difficult life as their mother. I'll be happy if they get jobs in the city, or even better in Korea with a good salary."

Gianto, age 36, also has a share tenancy relationship with his parents. Gianto and his father cultivate 4100 m² of sawah in four separate plots, only one of which they own. Gianto's father is the tenant of the other three share-tenanted plots. Gianto has no experience of migration, although he says that he would really like to migrate. "I was jealous when my younger brother went off to Cikarang as soon as he finished secondary school. He works in a factory. I really wanted to go to Jakarta, but then my father got sick with asthma, so I have to look after him and help with the [farming] work." At first, his father encouraged him to join him in collecting bamboo. He earned extra money as a motorcycle taxi driver (tukang ojek). Only a few years later did his father ask him to take over the work in the sawah. This was easy for him, as he had helped his parents in the sawah from an early age. His mother has a chronic health problem and has for many years been unable to help on the farm.

Although Gianto now contributes more of the farm work than his father, it is still the latter who takes all important decisions, including the timing of planting, choice of seed, fertilizer, and pesticides as well as decisions during the harvest period. Gianto's mother organizes the harvest, including how much paddy (or cash) will be given to Gianto after the owner has received his share. His father reserves part of the harvest earnings for the next season's cultivation costs.

For his own cash needs, Gianto buys stands of growing bamboo in the village, which he sells to a trader. His wife also runs a small food stall (*warung*) in front of their house. She also often helps with planting, harvesting, weeding, and sometimes fertilizing. Gianto also cares for two

cows: one owned jointly with his father, the other in a *gaduh*<sup>16</sup> agreement with a neighbour. Parental dominance is clearly seen in this family. Although Gianto is active in the farmers' group (*Poktan*), it's his father who is registered as member.

Regarding his prospect of inheriting land, Gianto said the sawah will be shared between him and his younger sister, a factory worker in Cikampek. "My father told me that it will be shared, but that my share will be greater."

The intergenerational transfer of agrarian resources is indeed a sensitive issue. Most of our informants felt uncomfortable when we raised the question of land inheritance. They told us that making an issue of land inheritance before the parents have died is taboo and not right. This, however, makes it difficult for the younger generation to request land from their parents. In many cases, although they do the bulk of the work on their parents' land, the parents still have the right to the harvest so long as they live and will determine how much paddy or cash is given to the young farmer.

Regardless, many young people decide to enter into such a relationship, working on their parents' land. In many cases, the parents are sick or elderly and need their children to work the farm. Many also imagine that helping on the farm will ensure that they will inherit the land when the parents pass away; cultivating the land while the parents are alive is proof that they are capable of being good farmers. Another reason for choosing to work on parental land is that they are freed from (part of) the production costs, compared to when they become share tenants on another's land. Generally, the parent will arrange for the next season's cultivation costs to be reserved from the last harvest.

Most young farmers, then, will only gain full ownership and control of the land when the parent who provides the land dies; while parents are still living, they are only "helping on my parents' farm" (if the parent is still involved in farm work) or "working my parents' land" (if the parent no longer contributes work but still controls the product).

<sup>&</sup>lt;sup>16</sup> Gaduh (agisting) is a form of livestock sharing where A raises an animal belonging to B and is given half of the sale price when it is sold, or half of the offspring.

There is no strict rule about the division of inherited land between sons and daughters—both normally inherit. There are cases where both inherit equally, and others where the sons' share was greater. The most important factor determining who actually has the opportunity to farm the land is which child has remained in the village and has farming experience. The siblings will come to an agreement on the division of the harvest, including a greater share for the one who cultivates the land. This often happens when the sawah in question is very small; a plot of 500 m², for example, will normally not be further divided but worked by one of the heirs with a crop-sharing agreement. Young (would-be) farmers with no prospect of inheritance, with only a tiny plot to inherit, or facing a long wait before taking over the land, will opt to enter a rental or share tenancy agreement with a landowner. An illustration of this is Santoso and his wife Watinah, a couple now in their early 40s.

Watinah and Santoso are from small-farmer families. They both completed secondary school and frequently helped their parents in the fields. Watinah's parents owned 600 m² of sawah, while Santoso's parents were landless share tenants. While still young, they both migrated for work. Watinah worked in a shoe factory in Tangerang as soon as she left school in 1993 and stayed until 2001 when she returned to the village to marry. Santoso first stayed in the village, helping his father on the farm and working as a casual labourer before becoming a travelling salesman in Jakarta from 1999 to 2001. He said that he had migrated to look for new experiences. In Jakarta, he met Watinah, also from Kaliloro. Before marrying, he bought a small plot of sawah (300 m²) with the help of a bank loan. Returning to the village, they say, was the natural decision to make when they wanted to form a family. "Life in the city is very expensive; our salaries are hardly enough to live on, and certainly not if we have children." They now have one daughter in junior secondary school.

Santoso's father had succeeded in obtaining a large (1.0 ha) share tenancy from an absentee owner. As soon as the couple returned to Kaliloro, they began to farm their tiny plot of sawah and helped Santoso's father on his tenanted farm. At first, the work was evenly divided between father and son, and the father often divided the harvest (paddy and/or cash)

with him, after delivering the landlord's 50 per cent share. Since 2010, however, Santoso has completely taken over the cultivation, as his father is too old to work. Watinah helps with planting, weeding, and harvesting. They still give Santoso's parents a share of the harvest, in kind or cash. Meanwhile, Watinah's parents have given her 300 m² of sawah. The couple are over 75 years old and have divided their land among their children. Her elder brother received a plot of the same size; Watinah says her plot is better as her brother's plot is subject to flooding. Watinah then rented this land out, receiving IDR 2 million (US\$143) for a four-year lease; she gave all of this money to her mother.

With a relatively large farm to cultivate, Santoso and his wife are one of the few couples with no other (non-farm) source of income, besides their one cow and three goats. Santoso explained that he uses the proceeds from the sale of the animals to pay school fees, while the proceeds from the farm are for daily needs. They both said that they intend to continue farming since they now have some land of their own and also a sizable, tenanted area. They don't expect their daughter to become a farmer, as she has never helped in the fields and knows nothing about farming; a steady job in the city, they say, would be better for her.

Karso, age 41, is another illustration of a young farmer who has no prospect of land to inherit.

As soon as he had completed junior secondary school (at about age 15 or 16), Karso migrated to Tangerang to work in a textile factory. "At that time, 10 of us, all the same age, went to Tangerang together. Some of them are still there; others have returned to the village like me and become farmers." He stayed only two and a half years in Tangerang; city life, he said, is no good as wages are low and living costs high. Returning to the village, he worked for some time as a casual labourer until he was offered work on the village secretary's watermelon farm, looking after the plants from sowing to harvest. In 1999, he migrated again, this time to Cilegon to work in a relative's furniture business. He left after only one year as the wages were very low. In 2001, he married a Kaliloro girl and found work in Purworedjo (the next district) on a friend's watermelon farm. After a year, he decided to stop when his wife gave birth to their first child and

has stayed in Kaliloro since then. He helps his father, a share tenant, on 1500 m<sup>2</sup> of sawah. As this is not nearly enough to support his family, he works part-time as a tractor operator and sometimes in construction or gathering stones from the riverbed; currently he earns wages both as tractor driver and works in a local batako.

According to Karso:

the main barrier to becoming a young farmer is land. If you want to become a farmer, you must have land. Farming like I do, I'm really just a labourer, as I have to cultivate someone else's land.

I became a rice farmer because I had no other choice; in fact I didn't want to, because there's no profit in it. As a share tenant, my share of the harvest is only IDR 700,000 (US\$50), while the costs can be up to IDR 500,000 (US\$36).

In fact, he would really like to shift to horticulture and grow chillies or watermelon, for example. But this requires a lot of capital. "I can't afford it," he told us.

The young women farmers in our sample experience the intersection of gender, generation, and class.

Yaya is 24 years old and married with a 4-year-old son. Orphaned when she was 5 years old, she was working at the age of 12, but her employer supported her education until she completed (vocational) secondary school with a qualification in secretarial work. After leaving school, she also left the village to work as a shop assistant and then in a food stall. When she was 20, Yaya married Jarwo and returned to the village. She is completely dependent on Jarwo's father for access to land. He owns only 700 m² of land used for rice cultivation, but as the neighbourhood head, he gets 0.6 hectares of village-owned irrigated rice fields in place of a salary. After two years of working for other farmers and helping her father-in-law, Jaya took over management of some of the land and now farms 2400 m², somewhat more than the average farm size in the village, as her father-in-law's share tenant. She gives him one half of the crop. Yaya has been the "main" farmer from the beginning. Jarwo does other work that brings in money more regularly than farming. "I decide

almost everything," says Jaya, "and do almost all the work, choosing the seed variety, making the seed bed, germinating the seeds, levelling the field, making the lines for the planting, recruiting and paying the planters, weeding, fertilizing, spraying and checking the crop every day." Despite being the main farm manager, Yaya does not attend the meetings of the local farmers' group since it is assumed that the members are men.

Yaya and her husband are busy earning wages in a range of activities. Jarwo works as a tractor operator and for a coconut oil enterprise. Yaya earns wages both as a farm labourer (planting, weeding, and harvesting) and in handicrafts, making woven laundry baskets for export on a putting-out basis. Yaya and Jarwo have also organized a group of four *tebasan* harvesters, working with another young couple for a middleman in the next village and using a small portable thresher.

Thirty-six-year-old Partini, like Yaya, became involved in farming only after marriage. During her childhood, she never worked in the fields. As soon as she finished secondary school in 1997, she moved first to Riau island to work on an oil palm plantation, then to West Java to work in a shoe factory. A year later, she relocated to Batam island to work in a CD-ROM factory and after three years, moved back to West Java where she found a job in a toy factory. When she moved back to the village to live with her parents, she married Sarwidi. For the first nine years of their marriage, they had no land of their own. To make ends meet, Sarwidi worked in construction while Partini worked for wages planting and harvesting, and they have continued working for wages to the present, in addition to cultivating her parents' and parents-in-law's land as share tenants. Partini now farms 1800 m<sup>2</sup> (almost half an acre) of land in three different plots. About 1200 m<sup>2</sup> is two rent-free plots, owned by Partini's parents-in-law respectively, while she sharecrops the third plot of 600 m<sup>2</sup>, which belongs to Partini's mother and aunt. Unlike Yaya, Partini plants both rice and vegetables: rice on the sharecropped land, and chillies, cucumber, and some other vegetables on most of her own land. This combination guarantees the supply of both rice and cash. Partini is involved in all stages of rice cultivation, and is the decision maker in most of them, including choice of seed variety and fertilizers as well as deciding when to plant, weed, apply fertilizer, and harvest. In the last planting season before the interview, when she decided to try fertilizer in tablet form, "[Sarwidi] just went along with it, leaving it to me as I am the one who applies the fertilizer." Partini, unlike Yaya, has no significant nonfarm activities as she is busy every day looking after the chillies, while Sarwidi works in construction and tends their goats. Partini estimates that their non-farm income provides about 60 per cent of total income and farming 40 per cent.

Yaya and Partini's experiences clearly show that they are both real farmers (not just farm helpers) with knowledge and direct involvement in farm management. But there is no farmer organization or group that recognizes them as farmers. Neither Yaya nor Partini is registered as members of the local farmers' group—nearly all registered members of this state-sponsored farmer group are men. We have only come across one registered woman member, an interesting case because of her different position in the village class structure. She provides our final illustration.

Menik, now aged 39, manages her farm in a quite different way from Yaya and Partini—she uses wage workers. Menik comes from a wealthy family. Her grandfather was a village head and a large landowner, her father was a teacher and civil servant, and her mother was a housewife. Menik herself is a graduate (in agriculture) of Muhammadiyah University, which is located in the nearby city of Yogyakarta. After a short period of employment in Kalimantan, she obtained a position in Kaliloro's Village Finance Institute (LKM), and in 2009, she became an assistant village official. In this position, she receives 1.0 ha of village-owned pelungguh land in lieu of salary. She parcels out 0.7 ha of this land to various share tenants, but has decided to manage 0.3 ha herself, using wage workers. Since her parents were landowners but not farmers, is actually a "newcomer" farmer, although not in the sense in which the term is normally used (see the explanations of "continuer" and "newcomer" farmers in Chap. 1). She and her brothers also inherited land from their father; she and her two sisters received the same amount (0.15 ha), while her elder brother received a double portion of 0.3 ha. Neither her brother nor sisters farm their land themselves. Menik is the only one. She is also the first in the family to manage a part of her land as a commercial farmer. Her biggest farm profits come from chillies. Each harvest can earn her IDR 30 million (US\$214), sometimes even more, after deducting all of the costs including hired labour. To this, she can add half of the proceeds of the rice harvest of her 0.7 of share-tenanted land; she always sells the standing crop so the income is in cash. She has invested part of the surplus earned from agriculture in non-farm enterprises, including a laundry, a poultry and livestock feed store, and a catering and wedding service that her husband runs. She has also established a commercial poultry farm that a neighbour manages on a profit-sharing basis. In turn, she has invested part of the proceeds of this non-farm income back into land, buying 0.25 ha of residential/garden land. Unlike Yaya and Partini, Menik is an active member of the local farmers' group, despite the general assumption that group members will be men; she attends meetings and voices her opinions. Owning land in her own right as well as her salary land, she has no concerns about her continued existence as a farmer.

Access to land, thus, has helped Menik to consolidate her position among the village bourgeoisie. Together with a mixed portfolio of income sources, these have allowed her to further accumulate land.

# Collective Farming for Youth: The *Karang Taruna* Project<sup>17</sup>

In all Indonesian villages, there are state-sponsored youth groups called *Karang Taruna*. These groups are expected to be active in organizing sports, preparing for the national Independence Day festivities, and so on. In 2017, in one corner of the village, the leader of the local Karang Taruna group, himself a share tenant and former migrant now in his 30s, encouraged the younger members to apply to rent a plot of rice land from the village government, and experiment with collective farming. He wanted to find a way for these teenagers to learn the basics of farming, to ready them for the time when they may also decide to return from migrant work and become farmers. "With this collective farming project,

<sup>&</sup>lt;sup>17</sup>This project has been analysed in greater detail in Ambarwati et al. (2017).

these teenagers who have never worked in the fields will know how to plant and do all the other tasks... If they don't make a success of life in the city, they'll certainly come home, and then what work is there for them except to become a farmer?" Despite initial opposition from the village government, the group lobbied until they got their way. They came in large groups to plant the rice, to weed it, and to harvest it. They were proud that despite their lack of experience, their harvest was no smaller than that of the neighbouring farmers. By 2022, they were into their ninth planting season and had developed various other incomeearning activities as well as organizing training sessions on making organic fertilizer. 18

#### **Concluding Reflections**

The main conclusion from this study is that nearly all of today's young farmers in Kaliloro have returned to farming after an initial period of outmigration. This confirms the importance of a life-course approach to the social reproduction of smallholder farming.

Thus, the typical "young farmer" in Kaliloro began farming in his (or her) mid-20s or even 30s and has a history of prior non-farm employment (usually involving a period of migration) before turning to farming. Many of them have no significant experience of helping on their parents' farm. Smaller numbers have stayed in the village to help their parents before taking over (part of) the parental farm land. There are a few from landless households who take over tenanted land that their parents formerly cultivated. Young farmers' livelihoods—like those of their parents—are built through pluriactivity: living from a small holding plus other sources (animals, wage work, petty trade, services, etc.). Young farmers also tend to be more innovative than their parents, though in modest ways, like growing vegetables on (part of) their rice fields.

While some of today's young farmers, who were teenagers at the time of our 2000 time-budget study, were used to helping their parents with

<sup>&</sup>lt;sup>18</sup> Meanwhile, two other Karang Taruna groups in Kaliloro followed their example and started collective farming projects, but these appear to have been short-lived.

farm work during their adolescence, the current generation of teenagers is the first generation who have no or hardly any experience of farm work.

The Karang Taruna collective farming project gives some reason for optimism that despite their deskilling and relative alienation from farming, it is not farming as such that these young people are allergic to. They do not want to spend their young adulthood helping their parents in a position of dependency, and maybe in future, they do not want to farm in the same ways that their parents farm. But they—or at least some of them—are willing to consider other styles of farming for the future.

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#### 414

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