Baseline Study on Child Labour in Tobacco-Growing Areas in Indonesia

Michelle Andrina

Akhmad Ramadhan Fatah

Ulfah Alifia

Rezanti Putri Pramana

SMERU RESEARCH REPORT

Baseline Study on Child Labour in Tobacco-Growing Areas in Indonesia

Michelle Andrina

Akhmad Ramadhan Fatah

Ulfah Alifia

Rezanti Putri Pramana

Editors
Dhania Putri Sarahtika
Liza Hadiz

The SMERU Research Institute
June 2021

Baseline Study on Child Labour in Tobacco-Growing Areas in Indonesia

Authors: Michelle Andrina, Akhmad Ramadhan Fatah, Ulfah Alifia, and Rezanti Putri Pramana

RESEARCH TEAM

SMERU Researchers

Michelle Andrina

Akhmad Ramadhan Fatah

Ulfah Alifia

Rezanti Putri Pramana

Hafiz Arfyanto

Regional Researchers

Rahmayati

Vita Veronita Hendrawati

Field Coordinators and Enumerators

[Probolinggo] Septy Indri Dewi Ariyanti (Field Coordinator)
Agustini, Ahmad Aviv Mahda, Dhimas Herdhianta, Diah Wahyu Wijayanti, Dita Ike Fitria Kuswarini,
M. Agus Muhtadi Bilhaq, Mohammad Syaifuddin, Muhammad Farid Arifin, Ratna Oktapiani Sari,
and Suhendra Eka Winanto

[Lombok Tengah] Muhamad Lin Abdul Azis Akbar (Field Coordinator)
Apriyana Hardiyanti, Baiq Husni, Berlinna Indrawati, Fadhil Fachrian, Ilhamudin, Mariun, Muhaz
Dzan, Rawan Suryal Ghani, Sri Kartini, and Thariqul Mujaddid

ACKNOWLEDGEMENTS

ABSTRACT

Baseline Study on Child Labour in Tobacco-Growing Areas in Indonesia

Michelle Andrina, Akhmad Ramadhan Fatah, Ulfah Alifia, and Rezanti Putri Pramana

To reduce the prevalence of child labour in the agricultural sector, an intervention programme called Strategic Partnerships for Reducing Child Labour in Agriculture (KESEMPATAN) has been initiated for five districts in East Java Province and West Nusa Tenggara Province. This baseline study provides information on the pre-intervention conditions in Probolinggo District and Lombok Tengah District. The collected data will be used to evaluate the programme's effectiveness in the endline phase. This study adopts a mixed-method approach, namely quantitative through a household survey of 500 tobacco households in 16 villages, as well as qualitative through in-depth interviews with the programme implementers as well as the village officials and community. Conducted after the tobacco season ended, this study compares the child labour prevalence one week before the survey and six months before the survey. The prevalence of child labour among households in tobacco-growing areas is relatively low in the tobacco off-season but peaked in the post-harvesting phase. The prevalence is also higher in Lombok Tengah (70.4%) than Probolinggo (10.7%), possibly due to different production capacities and child labourers' motivation to work. The child labourers also reported of working in situations and activities considered hazardous for children. Lack of awareness of the child labour issue is reflected by children and adults' permissive attitude. A considerable proportion of them find it acceptable for children under 15 years old to work, and more than half approve of children's involvement in tobacco leaf-processing. We recommend that the programme implementers optimize partnership with the private sector during the treatment-village selection, ensure that village officials and local cadres understand the programme's objectives to avoid mistargeting, hear from the children and adults' perspectives regarding the community activity centres, and involve all stakeholders in running the programme.

Keywords: child labour, tobacco growing, Probolinggo, Lombok Tengah

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

The SMERU Research Institute

LIST OF ABBREVIATIONS

ALP		Agricultural Labour Practices
BPS	Badan Pusat Statistik	Statistics Indonesia
CAPI system		computer-assisted personal interviewing system
CL		child labour
CPA spray		crop protection agents spray
DID estimation method		difference-in-differences estimation method
ECLT Foundation		Eliminating Child Labour in Tobacco Growing Foundation
FGD		focus group discussion
GTS		green tobacco sickness (acute nicotine poisoning caused by direct contact with green tobacco leaves)
GRDP		gross regional domestic product
HH survey		household survey
ICLS		International Conference of Labour Statisticians
ILO		International Labour Organization
ILO-IPEC		International Labour Organization - International Programme on the Elimination of Child Labour
JARAK	Jaringan Penanggulangan Pekerja Anak	Network of NGOs Working for the Elimination of Child Labour in Indonesia
KESEMPATAN Programme	Kemitraan Strategis untuk Menanggulangi Pekerja Anak di Pertanian	Strategic Partnerships for Reducing Child Labour in Agriculture
LPKP	Lembaga Pengkajian Kemasyaratan dan Pembangunan	Institute of Society and Development Studies
NGO		nongovernmental organizations
OE Approach		Outcome Evaluation Approach
OECD		Organisation for Economic Co-operation and Development
OSH		occupational safety and health
PAACLA		Partnership for Action Against Child Labour in Agriculture

posyandu	*pos pelayanan terpadu*	integrated health service post
PPP		public-private partnership
puskesmas	*pusat kesehatan masyarakat*	community health centre
RCT method		randomized controlled trial method
Sakernas	Survei Ketenagakerjaan Nasional	National Labour Force Survey
Santai	Yayasan Tunas Alam Indonesia	Indonesian Tunas Alam Foundation
STP Guideline		Sustainable Tobacco Production Guideline
ToC		Theory of Change
TR		time reference
UNCRC		United Nations Convention on the Rights of the Child
UNICEF		United Nation Children's Fund
WFCL		worst forms of child labour
y.o.		years old

EXECUTIVE SUMMARY

Introduction

In Indonesia, many children are still categorised as working children, and some of them work in hazardous working conditions. In line with this, the United Nations Children's Fund (UNICEF) (2014) stated that poverty and deprivation cause children vulnerabilities and drive them into child labour. Poverty in Indonesia is closely related to rural agriculture, as agriculture is the main income source for 63.7% of rural poor households in 2019 (Statistics Indonesia, 2019a). On the other hand, Law No. 39/2014 on Plantation regards tobacco as a strategic commodity that has an important role in social, economic, and environmental development in Indonesia. ILO (2009) argued that tobacco growing is a labour- and capital-intensive sector, and that many farmers use children as cheap labour.

Like other types of agricultural work which have high occupational risks and hazards, tobacco growing is also unsafe for children. This is due to factors such as exposure to the smell of the tobacco, to the dangerous chemicals from fertilizers and pesticides, and to long hours of heat, as well as the task of carrying heavy loads of water or tobacco leaves (ILO, 2009: 5). In addition to those, there is also the green tobacco sickness (GTS), which is acute nicotine poisoning that can make workers nauseous after the skin absorbs nicotine through contact with wet tobacco leaves (ILO, 2004: 1).

To achieve a Child Labour-Free Indonesia in 2022[i] and to protect children from hazardous work and other worst forms of child labour, collective actions by the government, private sector, and civil society are urgently required. The Eliminating Child Labour in Tobacco Growing (ECLT) Foundation supports the Network of NGOs Working for the Elimination of Child Labour in Indonesia (JARAK) to launch the Strategic Partnerships for Reducing Child Labour in Agriculture [ii] (KESEMPATAN) programme. At the subnational level, the KESEMPATAN programme advocates child-friendly villages through engagement with local institutions, information dissemination for members of the village community—including farmers and farm workers, and activities for children in the villages.

In response to this need, the ECLT Foundation supports The SMERU Research Institute to conduct a baseline study in two programme districts. The main objective of the baseline study is to establish details on the state of child labour in tobacco growing and profiles of households prior to the KESEMPATAN intervention programme in selected tobacco-growing areas in East Java and West Nusa Tenggara Province. Later in the evaluation phase, we will use the baseline data to measure the KESEMPATAN programme's impact.

Methodology and Study Locations

In this study, we use the definition of working children based on the 18th International Conference of Labour Statisticians (ICLS), which regards working children as children aged 5–17 years who participate in economic activities and domestic chores at the reference time (ILO, 2007: 14). The term "economic activity" covers all market production (for-profit/paid work) and certain types of nonmarket production (non-profit/unpaid work), including the production of goods for own use

---

[i]A target set by the Indonesian Government.

[ii]Strategic Partnerships for Reducing Child Labour in Agriculture.

such as in agricultural households. For the definition of child labour, we follow the 2009 Indonesia Child Labour Survey's age groups and number of hours worked and complement such criteria with the nature of work based on ILO Convention No. 182. We define child labour as:

1. children aged 5–12 years and working (economically active), regardless of their working hours;
2. children aged 13–14 years and working for more than 15 hours per week;
3. children aged 15–17 years and working for more than 40 hours per week; and
4. children aged 5–17 years and working, with the work being categorised as hazardous.

The data collection took place in Probolinggo District, East Java Province and Lombok Tengah District, West Nusa Tenggara Province in December 2019. The baseline study employed a mixed-method approach, with the qualitative part focusing on the programme design and developing the programme's Theory of Change (ToC) through in-depth interviews. Meanwhile, the quantitative part focused on collecting child labour prevalence and characteristic data through the household survey. There are two criteria of study households: the household must have at least one member working in tobacco plantation in 2019[iii], and there is at least one child aged 5–17 who resides in the household. There are 500 households surveyed in both districts, 272 in the treatment villages and 228 in the control villages.

Sample Characteristics

In this study, there are 1,803 household members surveyed. They consist of 108 children aged 0 to 4 years (6%), 628 children aged 5 to 17 years (34.8%), and 1,067 adults aged 18 to 84 years (59.2%). Household heads are mainly male in Probolinggo, but a third of the households in Lombok Tengah have a female household head. This might be explained by the percentage of widowed and divorced household heads in Lombok Tengah, which are much higher than Probolinggo. The adults in Probolinggo also have higher education attainment than the adults in Lombok Tengah, in which more than half of adults in Lombok Tengah have never enrolled in primary school or not completed it. Regarding child respondents, most children aged 5–17 years are still enrolled in school. However, there are 7.6% of children in Lombok Tengah who are no longer in school. Children who are no longer in the school mostly attended up to the junior-high-school level, but only half of them completed the level. The main reasons for not attending school are financial constraints and no interest in school or influenced by friends who had already dropped out from school.

The post-harvesting tobacco phase had already ended when the household survey started in December 2019. Within one week prior to the survey, most adults and children who were working[iv] were no longer involved in tobacco growing. They were working in other commodities or sectors while waiting for the start of rice planting season in January 2020. The respondents in Probolinggo were working in the agriculture sector, such as planting corn and chilli, raising cattle, and ploughing the field. Half of the respondents in Lombok Tengah, mostly female, were producing handicrafts, such as woven fabric, rattan handbags, and pottery. On the other hand, 42.7% of male individuals in Lombok Tengah were working in the construction sector.

[iii]In this report, referred to as "tobacco household".

[iv]There are 88.4% of children aged 5-17 years who were only in school, 5.1% who were in school while also working, and 2.1% who are only working.

The SMERU Research Institute

Main Findings

KESEMPATAN Programme

Until December 2019, the activities carried out both in Lombok Tengah and Probolinggo were still in the preparation stage, such as informing and briefing the district governments, and village government and cadres[v] about the programme, as well as identifying the prospective beneficiaries through a social mapping activity and a survey. However, since the village-specific programme had not been discussed yet between the programme implementers and village community, there was no detailed information on the planned village-level activities. In addition, some of the cadres also did not attend the briefing on the survey of prospective beneficiaries and did not ask facilitators or other cadres about the briefing. Thus, the cadres had difficulties answering questions from targeted beneficiaries regarding the programme details.

Other barriers related to the programme is the community's perspective on child labour and the programme itself. According to the informants, the issue of child labour becomes a sensitive issue particularly in tobacco farming because it is the main source of income in the community. Children who work to help their parents are seen as helping the family financially and letting children work is also seen as a way to nurture children to become independent. In addition to that, the community often associate intervention programmes with social assistance; in which, they expect to obtain financial assistance.

Child Labour Prevalence and Characteristics

In this study, we calculate the child labour's prevalence using two time references, within one week and within six months prior to the survey, to be able to capture the children's involvement during the post-harvesting stage between August and November 2019[vi]. Within one week prior to the survey, child labour prevalence was only 7.5% among 628 children aged 5–17 years old in tobacco households. However, children recalled that the prevalence is 41.9% within six months prior to the survey.. Lombok Tengah has higher prevalence of child labour than Probolinggo, the prevalence of child labour reached 70.4% in Lombok Tengah and 10.7% Probolinggo. In terms of child labourers' economic sector, the agriculture sector is still the sector with the highest proportion of child labour in Probolinggo even when the tobacco season is over. On the other hand, most child labourers in Lombok Tengah have shifted into the manufacturing sector, such as making woven fabric, rattan bags, and pottery.

The prevalence of child labour in tobacco growing within six months prior the survey was 39.5%. The child labourers were involved in various cultivation phases, but mostly in the post-harvesting phase. We also found that many elementary-level students[vii] are only involved in tobacco's post-harvesting phase. The elementary-level students' prevalence was only 2.1% within one week prior to the survey, but it was 37.5% within six months prior to the survey. Children's involvement in employment is often associated with economic benefits. On average, children work for 3 hours a

---

[v]Cadres are volunteers recruited to work on a specific task and in a specific area. Due to the nature of the cadres' role that is associated with women's gender role, such as working for an integrated health service post (*posyandu*) in a *dusun* (subvillage), in Indonesia, cadres are usually women.

[vi]We set the time reference up to the maximum of six months to eliminate potential recall bias if the children's last work was more than six months ago.

[vii]Elementary-level education is equivalent to the first six years of basic education. In Indonesia, the elementary-level students' ages range from 6 years old to 12 years old.

day and 4 days a week, and the average monthly income for a child labourer is Rp267,000 (USD 19.08[viii]). Most child labourers are paid based on their completion of work in a day.

The higher child labour prevalence in tobacco growing in Lombok Tengah than Probolinggo might be correlated with the different production capacities and curing processes. Farmers in Lombok Tengah have larger cultivation area of flue-cured tobacco and higher production capacity than farmers in Probolinggo. Consequently, there is a high demand of labour in Lombok Tengah, including child labour. As much as 69% of child labourers in Lombok Tengah said that their main reason for working in tobacco-growing is to earn income and that they mostly work for a non-family employer. In contrast, farmers in Probolinggo have smaller cultivation area of sun-cured tobacco, thus most child labourers worked for their family. In line with this, 63.6% of child labourers in Probolinggo said that their main reason for being involved in tobacco-growing activities is the willingness to help their family.

Occupational Risks Faced by Child Labour in Tobacco Growing

Involvement in tobacco-growing activities is considered unsafe for children (ILO, 2009: 5, 2004: 1). However, 95.7% of children who work in tobacco growing have worked in at least one activity considered as hazardous. Furthermore, 70.2% of child labourers who work in tobacco growing also reported at least one situation that can be considered as hazardous, although we were not able to measure the intensity of each hazard. Among the child labourers, 47.6% reported that they were exposed to a large amount of dust and fumes, including the dust from cured tobacco leaves as well as the fumes from the curing barn and the dust from the plantation field's dry soil.

The child labourers in tobacco growing also face other hazardous situations, for instance, when (i) being exposed to heat as they are working in the plantation field in daylight or near the tobacco curing barn, (ii) carrying heavy weight such as while transporting the tobacco leaves, (iii) working under limited lighting such as when arranging the fine-chopped tobacco leaves in the night, (iv) or using chemicals such as when fertilizing the tobacco plants. Although not all job-related activities need protective equipment, the use of protective equipment is still not common for many child labourers—51.2% of child labourers in tobacco growing do not use protective equipment at all.

In addition, 82.3% of child labourers in tobacco growing also reported one or more ailments when working. The most-reported ailments are extreme fatigue, skin problems (itching, redness, bumps, and spots), cough, and digestive problems. Among child labourers in tobacco growing who reported ailments, 40.4% said that they still went to school while feeling the pain and 28.9% said they were absent from school. However, only 17.2% of them saw a health officer, while 34% relied on self-medication.

Perspective on and Knowledge of Children Who Are Working in Hazardous Activities

We examined the respondents' perspective and knowledge regarding three issues: (i) the minimum age to work and to help with work; (ii) the children's involvement in hazardous activities; and (iii) the positive and negative impact on working children. We use the term "children who are working" because most respondents[ix] were not familiar with the term "child labour". It is important to understand that these are the respondents' perspective and should not be understood as the respondents' actual behaviour.

[viii]Using USD 1 = IDR 14.000,00 as exchange rate in December 2019 (survey time).

[ix]The respondents are children aged 9–17 years and adults.

The SMERU Research Institute

Compared with the adult respondents, the child respondents have more tendency to feel that children are capable to work. This is reflected by the children's answers regarding the minimum age to work. According to the child respondents, the average minimum age to help with work is 12 years old and the minimum age to work is 14 years old. Meanwhile, the average minimum age according to the adult respondents is 14 years old to help with work and 16 years old to work. For employment in the tobacco growing, 37.4% of child respondents and 49.2% of adult respondents' belief that children should not work in tobacco growing. However, when it comes to helping with work in tobacco growing, only 19.7% of child respondents and 29.2% of adult respondents believed that children should not help in tobacco growing.

Regarding children's involvement in hazardous activities, the majority of child and adult respondents already believe that children should not be engaged in hazardous activities. However, the adults are more permissive, especially in activities that might be common in their everyday lives such as using sharp tools (54.6%) or working in the field under the sun's heat (40.3%). Meanwhile, most of the child respondents do not feel that they should be involved in those hazardous activities. Children's involvement in processing the tobacco leaves is also deemed acceptable by more than half of the child and adult respondents. The percentage differences only appear in the provision of crop protection agents (CPAs), which might be due to the adults' view that older children (aged 15–17 years) can do it.

Around half of the child and adult respondents agreed that the positive impact of children working is that they can earn money. Besides money, adults also mentioned experience and independence as other positive effects of children working. Meanwhile, "practising self-discipline" and "making their parents proud" do not seem to be effects that the respondents commonly associate with children working. On the other hand, both child and adult respondents perceived that children who are working might have declining health and that working might also interrupt their school routine. However, more than 20% of child and adult respondents also believe that there is no negative impact for children who are working.

Recommendations

As each district is unique, the programme implementers should not give equal proportions of intervention and resources to each intervention district (*kabupaten*). Based on the baseline study, we have three recommendations.

1. Selection of Locations and Beneficiaries of the Programme

When selecting the locations for the intervention programme, the programme implementers should take into consideration their partner tobacco companies' interest. For instance, the selected villages are the companies' working location. With this step, there are three advantages to the programme implementation, which are as follows.

  a) The programme implementers can assure that all of the prospective villages are prominent tobacco producers.
  b) The programme implementers could access initial information regarding previous intervention (if any) regarding the child labour issue and the community's perspective towards children's involvement in tobacco growing activities.
  c) As the contracted farmers had received child labour socialization from the companies, the programme implementers can focus on delivering the programme for non-contracted farmers, farm workers, and their families.

The programme implementers also have the potential to gain village governments' trust and support since the governments assume that the programme implementers are partners of the tobacco companies. However, the programme implementers must find the way to ignite the village governments' awareness towards child labour issues and encourage the village governments to allocate resources and funding to make the intervention programme sustainable for the upcoming years.

The next recommendation is for the programme beneficiary selection. The village officials and local cadres should already have clear and complete information regarding the programme when they work with program implementers in selecting the beneficiaries. Lack of information might lead to mistargeting when listing the potential programme beneficiaries.

2. Intervention Programme Design

Effectiveness of the programme will also be largely dependent upon the quality of deliverance by the local cadres. Therefore, it is important to ensure that the selected cadres tasked with disseminating information and running each village's community activity centre are well-trained and equipped to perform their tasks. Aside from the possession of adequate skills, it is also important to select cadres who has a good relationship and presence among the beneficiaries. As the intervention programme's activity mostly will be delivered from the community activity centre, we recommend taking the following aspects into consideration:

  a) Engaging activities or facilities for children of any age.
  b) Additional value for the adults. The adults might think that the community activity centre is limited only to children. To attract the adults, the programme implementers should work together with other institutions or resource persons.
  c) Timing and benefits of the community activity centre. When designing the programme schedule, the programme implementers should plan more engaging activities (and if possible with rewards) during the post-harvesting phase of the tobacco season.

3. Collaborative Action

To support the implementation of a programme, it is vital that all members of society play a supportive role, hence creating an enabling environment to support the effectiveness and efficiency of the programme. To facilitate the implementation of the programme, village governments could provide the programme with a supporting legal framework such as through the enactment of a child-friendly village regulation. The village governments could provide a strategic location for KESEMPATAN programme's community centre in each village. They could also dedicate a place for tobacco-leaf processing that meets the occupational health and safety criteria. Community representatives should be involved in the information dissemination process, such as through sermons in the Al Quran recital events.

Program implementers should also work with schools to ensure the children are not absent from class during the post-harvesting phase. They should also provide extracurricular activities and equip children with adequate knowledge regarding child labour issues and occupational health and safety. Given that several tobacco companies have been actively making efforts to reduce child labour, the programme implementers or village officials should also consider the option of collaborating with private companies, particularly in terms of provision of facilities or financial support needed to sustain the implementation of the programme.

The SMERU Research Institute

I. INTRODUCTION

The introduction section begins with a contextual background for the Strategic Partnerships for Reducing Child Labour in Agriculture (KESEMPATAN) intervention programme and the objective of this baseline study. This section also outlines the definitions and framework used in the study.

1.1 Background

In Indonesia, many children are categorised as working children, and some of them work in hazardous working conditions. Based on the data collected by Statistics Indonesia (BPS) in the 2009 Child Labour Survey, 6.9% of children aged 5–17 years are considered working children. Specifically, as many as 3% of the total children aged between 5 and 17, or 43.3% of the number of working children, are classified as child labourers. Among the working children, 20.7% work for more than 40 hours per week, a condition that is considered hazardous for children. Moreover, 27% of working children also work as production labourers, as operators for plants and machines, and other elementary occupations, and these occupations cannot be categorised as light work for children (Statistics Indonesia & ILO, 2010). The Government of Indonesia acknowledges this issue in the Decree of the Minister for Labour and Transmigration No. 235/2003 on Types of Work that Endanger Children's Health, Safety, and Morals, as well as in the Ministry of Labour and International Labour Organization's (ILO) Roadmap towards a Child Labour-Free Indonesia in 2022.

United Nation Children's Fund (UNICEF) (2014) stated that poverty and deprivation are the cause of children's vulnerabilities and have drove them into child labour. On the other hand, poverty in Indonesia is closely related to rural agriculture[1], as agriculture is the main income source for 63.7% of rural poor households in 2019 (Statistics Indonesia, 2019a; Suryahadi, Suryadarma, and Sumarto, 2006). The 2009 Child Labour Survey also shows that 57.2% of working children are in the agricultural sector, and 69.9% of unpaid family child workers is also in agriculture (Statistics Indonesia & ILO, 2010). A study on child labour in agriculture, conducted by ILO in 2000, acknowledges the physical hazards posed by working in agriculture as a result of the nature of the work, the exposure to substances, as well as the poor working conditions. Children might be exposed to toxic chemicals, the use of dangerous machinery and tools, extreme temperature while working outdoors, dangerous animals, and heavy lifting or carrying of materials (ILO, 2000).

Law No. 39/2014 on Plantation regards tobacco as a strategic commodity that has an important role in social, economic, and environmental development. Based on the 2013 Agriculture Census, tobacco is the most cultivated crop among season-based plantation plants—there were 817,000 tobacco households and 273,000 hectares of tobacco-growing land. In 2018, the total land area for tobacco growing in Indonesia decreased to 203,000 hectares.[2] Of this number, 51.8% of the land area is in East Java Province, 20.9% is in Central Java Province, and 16.2% is in West Nusa Tenggara Province (Statistics Indonesia, 2019). However, based on ILO's findings (2009), tobacco is also a crop that is highly labour- and capital-intensive, and many farmers use children as cheap labours. Moreover, some of these children were forced to enter child labour because of their poor economic status (ILO, 2009). Hermanus et al. (2019) also found that children living in poverty in Kabupaten

---

[1]The agricultural sector, which includes food crops, plantation, and livestock husbandry, is an important sector in Indonesia. It ranked third in its contribution to Gross Domestic Product (GDP, 12.7%) and ranked first in labour absorption in 2019 (29.5%) (Statistics Indonesia, 2020).

[2]Directorate General of Estates, Ministry of Agriculture's data, accessed from Statistics Indonesia.

Jember and Kabupaten Lombok Timur often had to support their families by working in tobacco-growing areas.

Similar to other types of agricultural work which have high occupational risks and hazards, tobacco growing is also unsafe for children due to factors such as exposure to the smell of the tobacco, the dangerous chemicals from fertilizers and pesticides, and heat for long periods, as well as having to carry heavy loads of water or tobacco leaves, (ILO, 2009). There is also the risk of green tobacco sickness (GTS), which is acute nicotine poisoning that causes nausea after the skin absorbs nicotine through contact with wet tobacco leaves (ILO, 2004). Children are more vulnerable to GTS than adults because their body size is small relative to the dose of nicotine absorbed which makes them less tolerant to the effect of nicotine. Further adding to children's vulnerability is their lack of knowledge about tobacco-harvesting risks (McKnight & Spiller, 2005). Hermanus et al. (2019) also reported a high prevalence of child labour in tobacco growing and performing hazardous work, namely 12.05% in Jember and 25.3% in Lombok Timur.

To achieve a Child Labour-Free Indonesia in 2022 and protect children from hazardous work, collective actions from government, tobacco companies, and civil society are urgently required. The Eliminating Child Labour in Tobacco Growing (ECLT) Foundation supports the Network of NGOs Working for the Elimination of Child Labour in Indonesia (JARAK) to launch the KESEMPATAN programme. KESEMPATAN programme which stands for Strategic Partnerships for Reducing Child Labour in Agriculture (Kemitraan Strategis untuk Menanggulangi Pekerja Anak di Pertanian), is a programme initiated by Partnership for Action Against Child Labour in Agriculture (PAACLA) to contribute in reducing child labour in the agricultural sector in Indonesia. This programme involves several stakeholders from the government, private sectors, and NGOs. They collaborate in developing the programme and coordinate to have the programme run effectively. The programme activities target not only children working in agricultural sectors but also the parents, farmers, community, and local government, as well as PAACLA members. Between 2020 and 2022, the pilot of the KESEMPATAN programme will be launched at the national level and in five tobacco-growing districts: Lumajang, Probolinggo, and Jember in East Java, and Lombok Tengah and Lombok Timur in West Nusa Tenggara.

Hermanus et al. (2019) emphasized the importance of a nationwide legally binding policy as well as collaborative actions between government, tobacco companies, and civil society to eliminate child labour in tobacco-growing areas. This is in line with KESEMPATAN's programme objective to build engagement with related ministries, tobacco companies, and agriculture-related nongovernmental organizations (NGO) at the national level. At the subnational level, KESEMPATAN programme advocates for child-friendly villages through engagement with local institutions, information dissemination for members of the village community, including farmers and farm workers, and the development of children activities in the villages. Impact evaluation is needed to be able to assess whether the KESEMPATAN programme manages to achieve the intended goal of eliminating child labour in agriculture.

1.2 Research Objectives and Questions

In response to the need of an impact evaluation, the ECLT Foundation supports The SMERU Research Institute to conduct a baseline study in two programme districts. The main objective of the baseline study is to establish the initial condition and profiles of child labourers and their households prior to the KESEMPATAN intervention programme in selected tobacco-growing areas in East Java and West Nusa Tenggara. Later in the evaluation phase, we will use the baseline data to measure KESEMPATAN programme's impact.

Specific objectives of the baseline study are as follows.

1. To collect high-quality data on the prevalence of child labour in the selected tobacco-growing areas, main characteristics of the child labourers (5–17 years old), and their households, taking into consideration:
   a. The children's demographic characteristics, including: age, sex, disability status, parental status, educational status;
   b. Classification by occupation and status in employment: earnings, working hours, location of workplace, and types of unpaid household services carried out, as well as weekly hours spent performing said duties;
   c. Children's rationale for choosing to work;
   d. The different types of work performed by children in tobacco-growing areas; and
   e. The various forms of child labour prevailing in the area(s), including the hidden forms of child labour, and the worst forms of child labour.
2. To obtain information to support the analysis of occupational health and safety issues and consequences for child labourers.
3. To develop tobacco child labour and overall child labour measurements that are consistent with ILO measurement criteria and Indonesia's laws and regulations on child labour.
4. To provide ECLT with comprehensive information on a set of indicators on child labour in tobacco growing to guide the planning process for intervention programs in key focus areas.
5. To provide key selection criteria for the recruitment of prospective project beneficiaries for future ECLT intervention programs.
6. To identify the component of intervention's Theory of Change (ToC) for future evaluation.

To achieve the objectives, this study conducted a household survey and qualitative interviews. The household survey specifically focused on forms of child labour in tobacco-growing areas. The qualitative interviews aimed at gaining initial information regarding the design of the child labour project intervention. The product of the qualitative study is the intervention's Theory of Change.

The research questions answered using the household survey are:

1. What is the prevalence of child labour among tobacco-growing household samples in the selected areas?
2. What are the characteristics of child labour and their working condition?
3. What is the tobacco-growing household members' perspective on and knowledge of children who are working?

Meanwhile, the research questions that are answered based on qualitative interviews are:

1. What is the design of the KESEMPATAN programme?
2. How is the KESEMPATAN programme planned to be implemented?
3. How will the KESEMPATAN programme contribute to the reduction of child labour in tobacco-growing areas?

This study may also act as a background study for the KESEMPATAN programme. The program implementers can use the study's finding as a reference to inform the development of a monitoring, evaluation, and reporting system to track the progress and impact of the intervention. If necessary,

the program implementers also can use this study to adjust the programme's design and implementation.

1.3 Study Limitations

The study faced a number of challenges due to several factors. The timeline of the study was postponed. In the initial plan, we aimed to conduct the survey in September, during the peak tobacco harvesting season. Due to a lengthy process of administration and discussion, the survey was only able to be executed in December. In December 2019, given that the dry season was longer than the expected regular schedule, some respondents were still working in the tobacco plantation. However, most respondents were currently working on another job or preparing for rice planting season. Due to this, there is a possibility that the respondents, especially the child respondents, encountered recall bias.

There were also four common problems regarding the household survey. First, we used Statistics Indonesia's 2013 Agriculture Census data to identify the number of tobacco households in each village. However, the number of households involved in tobacco growing could have increased or decreased following the tobacco price fluctuation between 2013 and 2019. Second, there were misunderstandings among some village officials and cadres regarding the eligibility criteria. For example, some were unaware that there had to be at least one household member involved in tobacco growing in 2019, or that the child had to currently reside in the household. Due to the first and second problems, we encountered difficulties in finding eligible tobacco-growing households. Third, some household members refused to complete the interview. The main reason behind the rejection was generally because of boredom from answering questions rather than privacy, which disrupted the interview process as the respondent ended the interview halfway through. Fourth, some children did not want to be interviewed at all despite being around or physically in the house. Their parents/siblings said that the children were shy or afraid of strangers, so they had to represent the children in the interview.

Meanwhile, the main challenge faced during the qualitative fieldwork was the limited information available from informants at the village level. It is because the programme implementers had not disseminated the information about the programme yet. During the data collection period, the workshop for the programme design had yet to be held in both provinces. Henceforth, descriptions regarding the design and plan of the programme could not be obtained at the village level. The team could only obtain a general description of the programme's plan during the interview with JARAK.

1.4 Report Structure

The report is structured as follows. Chapter II presents the details of the definition and method adopted in this study. Chapter III provides initial information about the KESEMPATAN programme which was collected through qualitative interviews. Chapter IV provides situation analysis regarding the condition in the study districts (*kabupaten*), as well as the characteristics of the sampled tobacco household and its members. Chapter V analyses the prevalence and characteristics of child labour, as well as the knowledge and perspective of tobacco household members regarding children who are working. Chapter VI discusses the baseline findings and the evaluation plan for the end line phase. Lastly, chapter VII presents the conclusion of the study, as well as recommendations for the program implementers.

II. RESEARCH METHODOLOGY

This section provides information regarding the definition, conceptual framework, selection of the study area, and the methodology for data collection.

2.1 Definitions

We define children as individuals under the age of 18 years old, following the definition of the United Nations Convention on the Rights of the Child (UNCRC). The definition aligns with the National Child Protection Law No. 23/2002, then amended as Law No. 35/2014. Nevertheless, children might be involved in various forms of work, such as in the production of goods and services for their own final use, paid work, unpaid trainee work, volunteer work, or other forms of work (ILO, 2018). Not all types of work have negative impacts on children. ILO Convention No. 138, 1973 allows some forms of employment as part of education or training in schools, vocational education, or other training institutions. Children age 13 and above are also permitted to conduct light work under certain conditions as stated in ILO Convention No. 138, No. 182, and ILO Recommendation No. 190. The 18th International Conference of Labour Statisticians (ICLS) then refine the measurement towards an internationally accepted statistical definition of child labour.

2.1.1   Definition of Working Children

In this study, we use the definition of working children based on the 18th ICLS, which regards working children as children aged 5–17 years who participate in economic activities and domestic chores at the referenced time (ILO, 2007). The term "economic activity" covers all market production (for-profit/paid work) and certain types of nonmarket production (non-profit/unpaid work), including the production of goods for own use such as in agriculture households. The activity could be in the formal or informal sector, in urban or rural areas, and be in the form of legal or illegal activity. It also includes working as domestic workers in other people's households, as well as seeking for work.

2.1.2   Definition of Child Labour

Meanwhile, ILO categorizes child labour based on the age of the child, the number of hours worked, and the nature of work (ILO, 2007). ILO Convention No. 138 states that the minimum working age shall not be less than 15 years old, with light work allowed for children with the minimum age of 13 years and under certain conditions. ILO specifies that light work is "not likely to be harmful to their health or development, and not such as to prejudice their attendance at school, their participation in vocational orientation or training programmes approved by the competent authority, or their capacity to benefit from the instruction received" (ILO, 1973). Hazardous work, which is "likely to jeopardize the health, safety or morals of young persons", is allowed for adults aged 18 years and above. Besides hazardous work, any worst form of child labour (WFCL) is absolutely prohibited for children.

However, this definition of child labour has not been widely applied in the 2009 Child Labour Survey, which is a subset of National Labour Force Survey (Sakernas). To define child labour, the survey adopted ILO Convention No. 138 and modified the age group to align with Law No. 13/2003 on Labour. However, it is considered difficult to capture WFCL in the household survey, thus the survey uses working hour as a proxy for hazardous work, and considers working more than 40 hours per week as hazardous for children (Statistics Indonesia & ILO, 2010). For this study, we follow the Child

Labour Survey's age group and the number of hours worked aspects and complement them with the nature of work aspect based on ILO Convention No. 182. As a result, we define child labour as:

a) children aged 5–12 years and working (economically active), regardless of their working hours;

b) children aged 13–14 years and working for more than 15 hours per week;

c) children aged 15–17 years and work for more than 40 hours per week; and

d) children aged 5–17 years and the work is categorised as hazardous.

2.1.3   Definition of Hazardous Work

In line with SMERU's 2016 diagnostic study of child labour in tobacco growing areas, we conceptualize the hazardous work definition based on ILO Convention No. 182, ILO Recommendation No. 190, and Sustainable Tobacco Production (STP) Guideline by AB Sustain. WFCL, as defined by ILO Convention No. 182, include:

a) all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict,

b) the use, procurement or offering of a child for prostitution, production of pornography or pornographic performances,

c) the use, procurement or offering of a child for illicit activities, in particular, for the production and trafficking of drugs; and

d) work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.

The first three points are recognized as WFCL other than hazardous work, while the fourth one defines hazardous work. The STP Guideline is loosely adapted from ILO Recommendation No. 190 and provides a more detailed description for the context of tobacco growing with particular addition of the hazard of green tobacco leaves (Hermanus et al 2019), which consists of:

a) work which exposes children to physical, psychological or sexual abuse;

b) work underground, underwater, at dangerous heights or in confined spaces;

c) work with dangerous machinery, equipment and tools, or which involves the manual handling or transport of heavy loads;

d) work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to extreme temperatures, noise levels or vibrations damaging to their health;

e) work under particularly difficult conditions such as work for long hours or during the night— or work where the child is unreasonably confined to the premises of the employer/parent; and

f) physical contact with green tobacco leaves.

As this study covers any forms of child labour within tobacco-growing areas, we asked the children whether they encounter these situations while working in their job. In addition, we also adopted the list of hazardous activities in tobacco growing that was developed by Hermanus et al. (2019) in the diagnostic study for children who work in tobacco growing. However, we could not measure nor analyse the intensity among different exposures of each hazard.

Table 1. List of Hazardous Activities in Tobacco Growing

Seedling phase	Post-harvesting phase
1. Seedbed preparation 2. Applying pesticides 3. Fertilizing seedbeds 4. Clipping 5. Ploughing the land 6. Preparing drainage 7. Ridging	1. Placing the curing fuel into the furnace 2. Arranging green tobacco leaves 3. Removing the midrib of green tobacco leaves 4. Folding green tobacco leaves 5. Arranging folded green tobacco leaves 6. Finely chopping green tobacco leaves 7. Drying and curing green tobacco leaves 8. *Penyujenan* (sticking)—the process of bundling tobacco leaves using a stick prior to hanging them to be dried 9. *Gelantang* (Tying) 10. Hanging bundles of green tobacco leaves 11. Loading green tobacco leaves into the curing barn 12. Arranging green tobacco leaves inside the curing barn 13. Supervising curing barn 14. Unloading dried tobacco leaves from the curing barn 15. Packing before selling
Planting phase	
1. Fertilizing	
Maintenance phase	
1. Tilling the land 2. Weeding 3. Spraying the land with pesticides 4. Topping—cutting off the top leaves 5. Suckering—removing sprouts 6. Re-ridging 7. Applying suckercide—a substance used to inhibit the growth of sprouts 8. Fertilizing	
Harvesting phase	
1. Harvesting green tobacco leaves 2. Hauling green tobacco leaves 3. Packing green tobacco leaves 4. Carrying green tobacco leaves (from the field to the home/warehouse) 5. Cutting, preparing, and arranging curing fuel	

Source: Hermanus et al., 2019.

2.2 Conceptual Framework

This baseline study used the theory of change (ToC) as the conceptual framework for designing and understanding the initial conditions before the KESEMPATAN programme. ToC was first developed by Carol Hirscbon Weiss in 1995 and is defined as a theory about how and why a certain programme will work (Weiss, 1995). It describes the process of how an intervention programme can achieve its goal by outlining causal pathways and linkages in an intervention. ToC is widely used to design, monitor, and evaluate an intervention. Using ToC in a baseline study will be useful to identify the data which need to be collected and how to analyse it (Rogers, 2014). According to Weiss (1995), the strength of this theory is that it can avoid many pitfalls that threaten evaluation because it can link the results and programme's activities. It is also able to explain how and why the effects (or no effects) exist as a result of the intervention programme. If the results exist, we can conclude that they come from the programme's activities, not from any events happening outside them.

ToC consists of four main components: inputs/activities, outputs, outcomes, and impacts/goals. It describes the causal relationships among the four components. From each component, we identify the assumptions built into the programme. The definitions of the four components are as follows (OECD, 2002).

a) Inputs/activities: the financial, human, and material resources used in a programme or policy. Inputs are used to run the activities to produce specific outputs;

b) Outputs: the immediate effects of programme/policy activities as a result of the activities, or the direct products or deliverables of programme/policy activities; may also include changes resulting from the intervention which are relevant to the achievement of outcomes;

c) Outcomes: the likely or achieved short-term and medium-term effects or behavioural changes as a result of a programme or policy's outputs; and

d) Impacts/long-term goals: positive and negative, primary and secondary long-term effects and changes produced by a development intervention, directly or indirectly, intended or unintended.

According to Weiss (1995), to evaluate the interventions, evaluators need to construct methods for data collection and analysis to test assumptions so the TOC developed could be used to examine the extent to which programme theories hold. White and Raitzer (2017) explained that ToC can also identify counter theories, i.e. when interventions are carried out other than the planned, resulting in unintended outcomes. Rogers (2014) listed how ToC can support impact evaluation by identifying specific evaluation questions (especially those which have no substantive evidence yet), relevant variables in data collection, intermediate outcomes, aspects of implementation to be examined, and potentially relevant contextual factors. Rogers (2014) also emphasised that ToC should begin with a situation analysis to identify problems that seek to be addressed through the intervention, the causes and consequences of the problem, and the opportunities to manage the problem. We already obtained some preliminary descriptions of the situation analysis based on the 2016 diagnostic study. For this baseline study, we mainly adopted a quantitative approach and then supplemented it with a qualitative approach.

2.3 Selection of Study Locations

Quantitative and qualitative data were collected between the 12th to the 22nd December 2019. To provide information on the initial condition prior to the implementation of KESEMPATAN programme, we selected Kabupaten Probolinggo, East Java Province and Kabupaten Lombok Tengah, West Nusa Tenggara Province, as the study districts. We selected these two *kabupaten* out of five intervention *kabupaten* based on three considerations. First, we deliberately did not select Kabupaten Jember and Kabupaten Lombok Timur because the diagnostic study in 2016 already covered the issues within these two *kabupaten*. There were also other ongoing SMERU studies related to tobacco growing in similar villages in both places. Therefore, SMERU has enough information on the state of the two *kabupaten*.

The second consideration was based on the scale of tobacco production. Tobacco-growing areas in Probolinggo reached 10,042 hectares, while in Lumajang was only 1.880 hectares. Probolinggo also ranks third after Jember and Pamekasan in terms of tobacco production, reaching around 12,450 ton, while Lumajang's production was 1,885 ton (Statistics of East Java Province, 2020). Meanwhile, the programme only has two intervention *kabupaten* in West Nusa Tenggara Province, thus we selected Lombok Tengah. In 2018, Lombok Tengah's tobacco growing area was 9.36 hectares and the production was 15.63 ton (Statistics of West Nusa Tenggara Province, 2020). Lastly, Jember and Lombok Timur are well known as the major producer of tobacco. The programme implementers already identified that there are other child labour prevention programmes from tobacco companies and nongovernmental organizations (NGOs). On the other hand, Probolinggo and Lombok Tengah rarely, or perhaps never, become targeted areas for child labour prevention programmes.
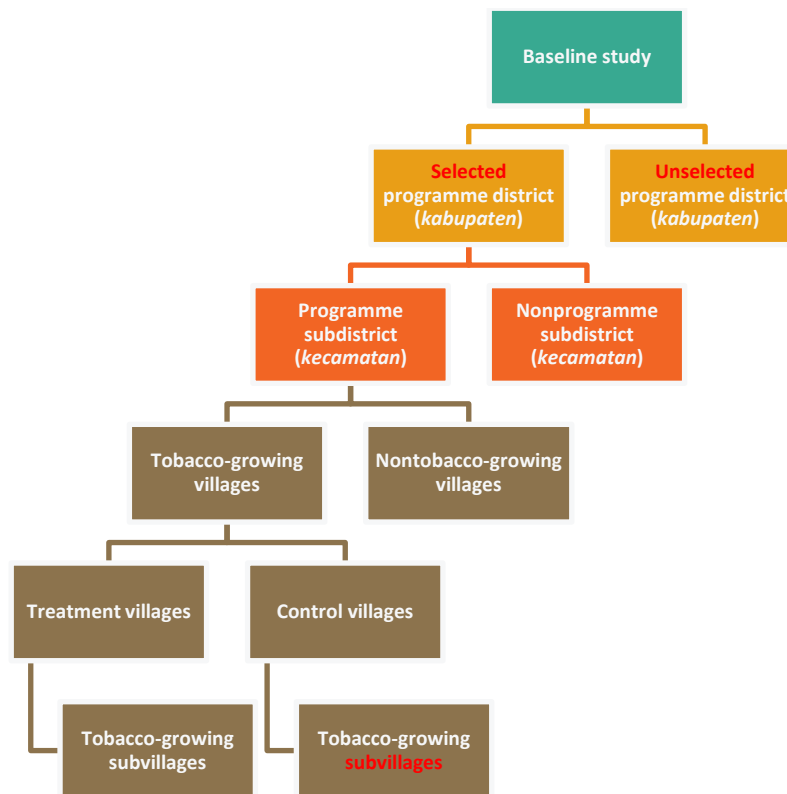
Figure 1. Selection of baseline study locations

The programme implementers had already selected the *kecamatan* and treatment villages in each *kabupaten*. The selection criteria were: (i) evident commitment and support from *kabupaten* officials and village officials, (ii) the size of tobacco-growing area, (iii) having at least one tobacco company or buyer who buys tobacco from the village, and (iv) having no other NGO with a similar programme in the village. The KESEMPATAN programme adopted a phase-in approach, which will be done between 2020 and 2022. In the first year of KESEMPATAN, its activities will be implemented in two villages in each *kabupaten*. The villages which were the programme's first-year sites were chosen because of the established relationship with the village governments, thus easing the process of implementing the KESEMPATAN programme.

In order to be able to evaluate the programme's impact in the end line phase, we needed control villages. The control villages consisted of tobacco-growing villages that will not receive the KESEMPATAN programme. To create the control villages, we utilized Agriculture Census 2013's data, annual publications of the *Kecamatan dalam Angka* (Kecamatan in Figures), and SMERU's Poverty Map 2015. The control villages' selection criteria were:

   a) size of tobacco growing area,
   b) number of tobacco-growing households, and
   c) village poverty rate.[3]

We also asked the program implementer regarding the availability of other NGO programmes in the control villages. After that, we selected three control villages[4] with similar characteristics with the treatment villages' *kecamatan*. Thus, there are 16 study villages in total from both districts.

---

[3]We chose village poverty rate as a criterion to align with the social mapping result.

[4]Considering time and budget allocation, we had to limit the number of study villages to eight villages for each *kabupaten*.

Then, we had discussions with programme implementers and village officials to select up to four tobacco-growing *dusun* (subvillages)[5] in each village. The sampling frame was the tobacco-growing *dusun*.

Table 2. Characteristics of the Study Villages

No	*Kecamatan*	Village	Tobacco Households[a] (n)	Tobacco Land Area[a] (Ha)	Poverty Rate[b] (%)
Probolinggo					
1	Pakuniran	A	1399	25.9	32.0
2	Pakuniran	B	790	127.6	32.9
3	Kotaanyar	C	1566	128.4	26.2
4	Kotaanyar	D	833	188.2	29.8
5	Paiton	E	924	123.1	8.7
6	Paiton	F	813	149.1	18.8
7	Besuk	G	756	83.4	21.6
8	Besuk	H	995	90.5	32.2
Lombok Tengah					
9	Praya timur	I	697	356.8	12.03
10	Praya timur	J	1,488	750.9	9.2
11	Praya timur	K	1,929	875.9	11.18
12	Praya timur	L	1,223	789.0	8.74
13	Praya timur	M	521	273.8	8.28
14	Praya timur	N	1,049	368.6	9.25
15	Janapria	O	586	392.6	9.43
16	Janapria	P	617	255.1	8.86

Source: [a]Statistics Indonesia Agriculture Census, 2013; [b]SMERU PovertyMap Estimation, 2015.

Note: treatment villages are highlighted in green.

2.4 Quantitative Data Collection

Before the start of the baseline survey, the programme implementers conducted a village social mapping using a participatory approach. In the social mapping event, village representatives discussed and determined targeted *dusun* and criteria for programme beneficiaries and listed the suggested beneficiaries' names. Afterwards, the village representatives conducted a survey to identify the vulnerable children and child labourers in that village.

In order to evaluate the programme's impact efficiently, we decided to use the list of names from the village representatives' survey for our list of respondents. However, prior to the baseline survey, the programme beneficiary criteria and list of names were only available for two villages in Probolinggo and two villages in Lombok Timur. Given the situation, we decided to create

---

[5]A *dusun* is an administrative area within a village, consisting of a number of RT. The programme implementers had to take measures regarding the effectiveness of the implementation and reached the conclusion that it would be hard to deliver and maintain the programme in more than four *dusun*.

The SMERU Research Institute

respondent lists for the rest of the study villages. We assumed that the other villages would also develop similar criteria for beneficiary selection/enrolment. Based on discussion with the program implementers and village officials, there are two criteria for targeted households:

a) The household must have at least one member working in tobacco plantation in 2019.
b) There is at least one child aged 5–17 years who resides in the household.

Although not mandatory, it is preferable that the household is considered poor according to the physical standard in that village or have a child who is working or helping in tobacco-growing activities. This was not a compulsory criteria as there were different poverty standards between villages, complex definitions of child labour, and limited number of tobacco-growing households in some *dusun*. After we had the household's name and address, we sort them by address and conduct systematic random sampling to create the sample household list. In cases of unavailability of eligible households, we employed snowball sampling techniques to find another respondent.

We surveyed 38 households in each control village and 27–28 households in each treatment village. In total, there are 500 households surveyed in both *kabupaten*, namely 272 in the treatment villages and 228 in the control villages. Before the survey began, enumerators were required to re-identify the households' eligibility[6] and asked each of the households' member to sign an interview consent form. The household survey involved data collection using tablets/smartphones equipped with a computer-assisted personal interviewing (CAPI) system. The questionnaire consists of nine modules and covers individual-level and household-level questions.

Based on Statistics Indonesia's glossary, a household is a person or a group of people who inhabit a part of or all parts of a physical building, the latter take care of their daily needs together. Individuals identified as household members are those who stay in a household for six months or more, or those who have stayed in the household for less than six months yet plan on moving into/living in the household for six months or more. The household eligibility is assessed in Module A, and the household member eligibility is assessed in Module BA.

---

[6]We did not re-assess the household's poverty status through verbal question because it is not a mandatory criterion.

Table 3. Questionnaire Modules

Module	Description	Source
Household Location	Contains information on the respondent's address, contact number, and coordinate points of the respondent's house. The purpose is to make it easier to locate the respondent's residence in the next survey.	Answered by the main respondent, household level
A Household Eligibility	Contains questions to filter a household's eligibility to be the study's sample. A household must: 1) have at least one member that is working in tobacco growing in 2019; 2) have at least a member aged 5–17 years; and 3) have no plan on moving from the study village at least three years after the survey is conducted	Answered by the main respondent, household level
BA Household Member Eligibility	Contains individual-level information regarding the household members' eligibility for the study. The individual must be 1) a member of a selected household; 2) not migrating or at least has stayed in the house for a minimum of six months or has stayed for less than six months yet plans to keep staying in the sampled household.	Answered by every household member, individual level
B Household Member Characteristics	Contains basic information on individual household members such as age, marital status, education, health, and disability-related conditions.	Answered by every household member, individual level
C General Occupation	Contains individual-level information on activities and general occupations in the last week or within the last six months prior to the survey. It also contains individual-level information that includes exposure to hazardous elements in their workplace and other aspects of occupational safety and health. For children, there are additional questions regarding domestic work.	Answered by every household member above 5 years old, individual level
D Occupation in Tobacco Growing	Contains individual-level information on any household member who worked in tobacco-growing this year. It also contains information that includes exposure to hazardous elements in their workplace and other aspects of occupational safety and health in tobacco growing.	Answered by every household member above 5 years old who worked in tobacco growing this year, individual level
E Knowledge and perspective Regarding Child Labour	Contains information on household member aged 9 years and above regarding their knowledge of and perspective on certain occupational duties, the minimum age allowed, and the impact of working children. This module must be answered directly by the respondent (cannot be represented).	Answered by every household member above 9 years old, individual level
F Household Characteristics	Contains household-level information regarding the housing conditions, access to clean water and sanitation, electricity, and household's assets.	Answered by the main respondent, household level
G Household Food Security	Contains questions regarding the household's food security over the past year.	Answered by the main respondent, household level

Interviews for Module C and D for children aged 5–8 years were allowed be represented by the children's parents/guardians with the presence of the children to verify the information when required to do so. For children aged 9–17 years, the interview was done directly in a place where their parents/guardians can see but not hear the interview process. This is to ensure that the children's answers are not affected by their parents/guardians. For Module E, the respondents had to answer the questions by themselves and they cannot be represented by other household members. However, we allowed adjustments of the interview methods to accommodate the

children's preferences. Prior to the interview, we provided a consent form to ensure that all data were collected ethically in accordance with international standards regarding research involving children.

The data generated were analysed to produce descriptive statistics on the general situation of tobacco household in tobacco growing area. Using the same data, we analyse the characteristics of child labour in tobacco growing and in other sectors. We also provided a comparison between the control villages and the treatment villages. For the analysis in the endline study, a sample of 500 households might not be sufficient to detect the treatment effect if the expected differences in outcomes are small. In this case, a district-level analysis is not feasible. By contrast, if the expected differences are large, we might be able to disaggregate the analysis to the *kabupaten* level.

2.5 Qualitative Data Collection

The qualitative data collection was conducted with the aim to provide an overview of the KESEMPATAN programme and identify the component of KESEMPATAN programme's ToC. At the national level, we interviewed the programme designer from JARAK. At the *kabupaten* level, we interviewed five targeted informants at the Institute of Society and Development Studies (LPKP) and Indonesian Tunas Alam Foundation (Santai) as the programme implementers to identify the planned process of KESEMPATAN programme implementation. At the village level, the team conducted in-depth interviews with ten informants consisting of village officials and local cadres to find out their perspective on as well as their support of the programme. The interviews took place in two treatment villages in each *kabupaten* that will receive the programme in 2020.

The topics of the interviews were designed in accordance with the objectives of the study. These objectives were broken down into five main topics: (i) design of KESEMPATAN programme, (ii) planned implementation of KESEMPATAN programme, (iii) situational analysis (problems, causes, and opportunities), (iv) ToC's components (inputs, outputs, outcomes, and impacts), and (v) assumptions and risks underlying the ToC's components. Questions have been developed for each topic for each identified informant.

The analysis plan of the qualitative findings began with the development of interview notes from each key informant interview. Then, we synthesized the interview notes into thematic matrixes to allow researchers to be familiar with the data and to help researchers identify themes and patterns for the formulation of the intervention's ToC.[7] The two documents were used as the basic tools to identify and validate KESEMPATAN programme's ToC diagram components. Given the already established coding unit of information, the coding strategy used in the qualitative analysis was the direct content analysis (Hsieh and Shannon, 2005). The direct content analysis has a more structured approach and is useful for a study with an already established theoretical construct (Hedlund, 2013; Hsieh and Shannon, 2005), which is suitable for this study since each component of the study's framework has been identified albeit needing further validation.

---

[7]The matrix referred to here is in the form of columns and rows in which the first column consists of units of information that are the main subject matters of the research, while the top row consists of interviewed sources or institutions. Researchers will not produce information that is copied and pasted from interview transcripts. Instead, the outputs will be in the form of paraphrases, syntheses, or quotes from informants' answers (Averill, 2002).

III. KESEMPATAN PROGRAMME

This chapter will provide an overview of the programme's planned implementation and elaborate its implementation strategy at the village level. This chapter will also present the programme's ToC, describing precisely how the programme could achieve its main objective, the elimination of children in tobacco growing. In addition, assumptions and risks necessary for the effectiveness of the programme are also outlined and explained in the last section of the chapter.

3.1 Planned Implementation

3.1.1 Overview of the Planned Implementation

Until December 2019, the activities carried out both in Lombok Tengah and Probolinggo were still in the preparation stage, such as informing and briefing the *kabupaten* government officials, village government officials, and cadres about the programme. The programme implementers also identified the prospective beneficiaries through a social mapping activity. LPKP and Santai have established good relations and communication particularly with the government officials to gain support for the programme.

Before implementing the programme in the villages, LPKP and Santai conducted a social mapping activity to identify the targeted *dusun* as well as criteria of selection of beneficiaries. The village government officials, cadres, and youth representatives then carried out a survey to the targeted households to verify data and information. According to the informants, the survey process went smoothly though with some difficulty in explaining the objective of the survey. Some beneficiaries expected that they might get monetary social assistance. However, the informants said that they did not correct this misinformation and tend to acknowledge beneficiaries' expectation. This issue needs to be addressed to avoid further misunderstanding among the beneficiaries. The program implementers should clarify that the beneficiaries will not receive financial aid from the KESEMPATAN programme.

LPKP and Santai are also assisted by local facilitators in implementing the KESEMPATAN programme. Local facilitators are recruited by LPKP and Santai from their programme staff. Local facilitators are local people who are familiar with the area, especially with the village condition, culture, and community. By placing local people as facilitators, it is expected to enable a smooth process, from program preparation to implementation. The local facilitators will also be assisted by village government officials or cadres in delivering the KESEMPATAN programme. The programme implementers stated that they will also approach village figures, such as the village heads, religious leaders, and other public figures to enlist the support for the programme. Even so, according to some of the cadres, they were not sufficiently informed on their role in the programme implementation. Some of them also reported that they did not fully understand the purpose of the programme. They were only asked to conduct the survey.

3.1.2 Barriers to the Implementation of the Preparation Stage

According to the informants, there are several barriers to performing the programme preparation activities. For LPKP and Santai, the barriers are mostly related to the selection of targeted villages, criteria for child labour, communities' perspective regarding the issue and the programme, and technical problems. During the time Santai was collecting information on the potential intervention villages in Lombok Tengah, there were no news of planned administrative changes in the targeted

villages. However, at the time Santai conducted briefings and social mapping activities, it turned out that the targeted villages have been split into two administrative areas, thus Santai had to re-conduct the same activities in the other part of the village.

The next barrier is regarding the people's knowledge and perspective on the child labour issue and the programme. According to the informants, this issue is still considered as a sensitive issue as it is related to the farmers' profit. Involving children to help their parents at work is also seen as a way of raising children to become independent. The community tend to regard the issue of child labour as not an important issue to be advocated as they also benefit from it. In addition to that, the people often associate an intervention programme with social assistance; thus, they will expect to obtain financial assistance.

However, the cadres and village heads considered child labour as the most serious child-related issue to be addressed in their villages. The cadres and village heads also regard the community's mindset concerning the programme as an obstacle to the preparation activities (social mapping and survey) because the survey is associated with the government's social assistance programme. The cadres were also having difficulty in answering the beneficiaries' questions regarding the programme (the selection process and criteria, the benefit, etc.) because some cadres did not attend the briefing and asked for the information from the facilitators or other cadres.

Up to mid-December 2019, there was no detailed information on the activities planned to be conducted. The programme implementers explained that they already had a general idea of the activities, but not in detail. Meanwhile, they plan to create some activities such as running a learning centre, organizing capacity building activities, educating parents and farmers, and organizing a child forum. The detailed activities for the learning centre will be discussed with the village governments and cadres so it will suit the community's needs, especially the beneficiaries. Santai even expands the activities to other child-related issues in the villages, For instance, facilitating the procurement of legal documents such as birth certificates. On the one hand, this can be viewed positively since the village will gain other benefits and Santai can maintain a good relationship with the people of the villages. However, this may have negative consequences as Santai may put more attention to those issues rather than the KESEMPATAN programme itself.

3.1.3   Stakeholders' Response to the Programme

According to LPKP and Santai, the *kabupaten* and village governments have positive responses to the programme. They seem willing to provide support for the programme. This information was confirmed through interviews with village heads that showed their interest and positive support for the programme. The village heads stated that they are ready to give any support for the success of the programme if the programme implementers are committed to the programme. This is a good sign for the programme as authorities' support is a resource needed for a programme to work.

However, there was no formal agreement on the cooperation between the programme implementers (LPKP and Santai) and the *kabupaten* governments and village governments. The programme implementers said that a formal agreement is not needed because it is not something they usually do when cooperating with the government on some programmes. Albeit such form of agreement is a common practice, it still puts the programme at risk as the commitment could be withdrawn at any time, especially given the fact that the government's attitude towards a certain programme depends on the social and political climate. In addition to that, replacement of authorized officials usually happens in government agencies, so the response and policies towards the programme may also change.

3.2 Assumptions and Risks

There are several assumptions underlying the design and implementation of the programme which are crucial in determining the success of the programme. These assumptions are based on the pre-existing condition in the area where the program will be implemented, including the capacity of programme implementers, the capacity of program recipients, the implementation strategy, and the attitude of the village government towards the programme. Below is the detailed assumptions.

a) The programme is implemented as planned and in accordance with the design.
    (1) Activities implemented in the village are carried out in a strategic location thus accessible to a wider audience.
b) Beneficiaries of the programme could comprehend the information disseminated.
    (1) Beneficiaries are cooperative, such as by routinely attending meetings and taking part in the activities designed in the programme.
c) Programme implementers and facilitators have the capacity for effective programme implementation.
    (1) The facilitators who are responsible for training the cadres must have adequate comprehension and the appropriate skills to deliver the information in a manner suitable to the beneficiaries' capacity.
    (2) The facilitators and programme implementers (LPKP and Santai) can provide adequate training and expert support throughout the programme implementation for the cadres and regional facilitators.
d) Village governments are committed to supporting the implementation of the programme.
    (1) The village governments openly permit the implementation of the programme.
    (2) The village governments are willing to provide in-kind support throughout the implementation of the programme when necessary.
e) PAACLA members are committed to supporting the programme.

We also identified several potential risks which may inhibit the effectiveness of the programme. The identified risks are located within the programme implementers, beneficiaries, and village governments. The risk identified at the programme implementer level is the capacity of delivering the programme, particularly the capacity to deliver the information comprehensively and ensure that recipients understand. This is also associated with the risk at the beneficiary level. Interviews with programme implementers, village government officials, and regional facilitators led to a conclusion that the community has already internalised the positive value of children's involvement, therefore dissemination of information of a contradictory view through the programme may potentially cause a disagreement among the community. In addition, the common association between programme intervention and assistance might cause a rift among beneficiaries since the KESEMPATAN programme does not provide financial assistance nor amenities. Lastly, the risk we identified is at the government level where there is lack of support, or even permit, from the governments to implement the programme in the intended areas. We have identified a dynamic attitude and relationship among government officials and local organisations. As reported by local programme implementers, the government officials' attitude towards the programme is constantly evolving, henceforth there is a potential for a sudden change in the village governments which may result in their withdrawal of support for the programme.

3.3 Theory of Change (ToC) Components

Based on the data and information collected from the qualitative study, we developed the KESEMPATAN programme's ToC as shown in Figure 2.

Inputs/Activities:
KESEMPATAN Programme

OUTPUTS

PAACLA members initiate prevention of child labour in the agricultural sector

Local cadres gain knowledge and skills to be trainers on the child labour issue

Stakeholders have a clearer understanding of national commitments on regeneration of tobacco production and the elimination of child labour

Villages enact child protection policies, including those on elimination of child labour

Increase knowledge of PAACLA members on program design and evaluation related to child labour

Farmers and farm workers can distinguish forms of child labour

Establish child-friendly villages

Child labourers reduce their involvement in tobacco plantation

OUTCOME

Strengthen PAACLA institution as a partnership to eliminate child labour in the agricultural sector

Increase the understanding and awareness of farmers and farm workers on the issue of child labour

Increase stakeholders' knowledge on the issue of child labour in the agricultural sector

Establish a child-friendly village model

Long-term goal:
Contribute to reducing the prevalence of child labour in agriculture

Assumptions
a) The programme is implemented as planned and in accordance to the design.
b) Beneficiaries of the programme could comprehend the information disseminated.
c) Programme implementers and facilitators have the capacity for effective programme implementation.
d) Village governments are committed to supporting the implementation of the programme
e) PAACLA members are committed to supporting the programme.

Figure 2. KESEMPATAN programme's Theory of Change (ToC)

IV. GENERAL CHARACTERISTICS

This section provides a situation analysis regarding the macroeconomic condition in the study districts, as well as the characteristics of the sample tobacco households and the household members.

4.1 Study Area Characteristics

4.1.1 The Macroeconomic Condition of Kabupaten Probolinggo

Kabupaten Probolinggo is known for its agriculture and tourism potential. The agriculture sector (including forestry, farm, and fisheries) is the sector with the largest contribution to the Gross Regional Domestic Product (GRDP), which makes up 32.2% of their entire 22 trillion rupiah (USD 1.57 billion) GRDP in 2018. However, the growth in the agriculture sector has been slowing down, even going negative since 2016, despite at a modest rate (-0.02% growth from 2017 to 2018). This does not greatly influence Probolinggo's overall GRDP growth as it experiences an average growth rate of 4.7% per year on average in the last five years, but Probolinggo's GRDP is growing at a rate lower than the East Java Province, which is at 5.5% per year.
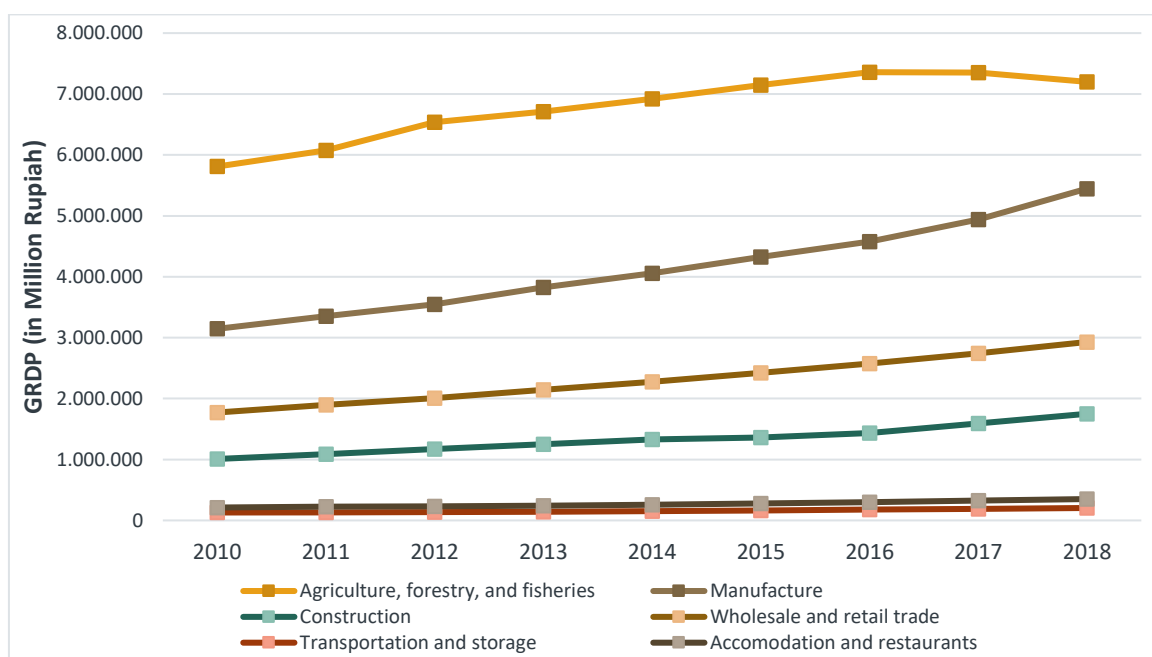
Figure 3. GRDP of Kabupaten Probolinggo (based on economic sectors)
Source: Statistics Indonesia (BPS), 2010-2018.

In contrast to the agriculture sector, other sectors show upward trends in growth. Figure 3 shows the growth of the major sectors in Probolinggo. [17] Manufacturing is the sector that grew significantly, increasing at a rate of 10.2% between 2017 and 2018, a contrast to the growth rate of

---

[17] The top 4 sectors based on their contribution to the Kabupaten Probolinggo GDRP in 2018 are: agriculture (32.3%), manufacture (24.3%), wholesale and retail (13.1%), and construction (7.8%). Meanwhile, the remaining sectors contribute less than 4% each to the GRDP.

The SMERU Research Institute

the overall GRDP (4.5%) in the same period. The GRDP growth is also supported by strong growth in the wholesale and retail sector as well as the construction sector. The construction sector could grow at 11.1% in the 2016–2017 period partly due to the construction of the Pasuruan-Probolinggo toll road.

In Probolinggo, the concern lies in the distribution of labour force by economic sector. As seen in Table 4, almost half of the labour force in Probolinggo (45.5%) are in the agriculture sector. This might be a cause for concern as the negative growth of the agriculture sector can have an impact on the labour force absorption. The decreasing amount of land for farming in the region might also contribute to the negative growth of the agriculture sector, as well as its labour absorption. According to the 2016–2017 data from the Probolinggo food security and agriculture agency, there is a decline of 130 hectares of agriculture land between 2016 and 2017. On the other hand, there is only 8.1% of the labour force in the manufacturing sector. The small proportion of the labour force in manufacturing may be caused by low-level skills. Based on the labour force's educational attainment, more than 50% of the labour force in Probolinggo only have primary level education, while 15.5% of the labour force have upper secondary education.

Meanwhile, regarding unemployment in Probolinggo, the labour force participation of Probolinggo in 2018 is at 68.4%, which is slightly lower than the provincial level (69.4%), but higher than the national level (67.3%). On the other hand, the unemployment rate (4.1%) is similar to the provincial unemployment rate (4.0%).
Breaking down the participation rate by sex provides an insight as to unequal participation. The labour force participation rate for the females is 51.4%, significantly lower than the male participation rate of 86.7%.

Table 4. Labour Force Composition per Economic Sector

Employment Condition	Probolinggo	Lombok Tengah
Labour force distribution by economic sector (%)		
Agriculture	45.5	33.8
Manufacturing	8.1	18.2
Construction	8.2	8.4
Wholesale and retail trade	18.0	17.3
Transportation and storage	2.8	2.8
Accommodation and restaurants	3.4	3.8
Other sectors	14.0	15.5
Total	100.0	100.0
Labour force participation (%)		
Male	86.7	78.3
Female	51.4	57.4
Total	68.4	67.0
Unemployment rate (%)		
Male	4.7	2.7
Female	3.2	3.5
Total	4.1	3.1

Source: Calculated from the National Labour Survey (Sakernas) 2018.

4.1.2   The Macroeconomic Condition of Kabupaten Lombok Tengah

Kabupaten Lombok Tengah has experienced a major economic shift in the past 7–8 years with the relocation of the Lombok Airport to Kabupaten Lombok Tengah. The airport started to operate in 2011 and the GRDP contribution shows the massive jump in the transportation and storage sector between 2010 and 2012 (Figure 4). However, this sudden growth only lasted until 2013, which by then a steady modest growth continued, followed by stagnancy in 2017 to 2018 (with a growth rate of -0.1%). The agriculture sector has the largest GRDP contribution in 2018.[18] In terms of growth, the agriculture sector is still the largest contributor and will remain so with its modest steady growth of 2.2% between 2017 and 2018. However, the construction and wholesale sectors were able to have a 5% growth rate over the period of 2017 to 2018.
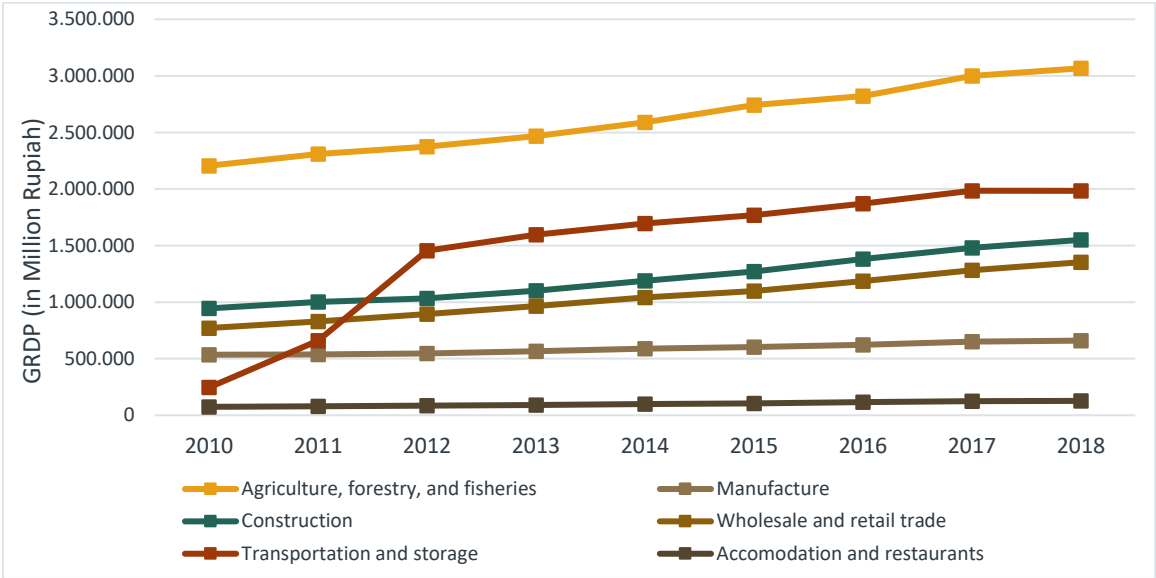
Figure 4. GRDP of Kabupaten Lombok Tengah (based on economic sectors)
Source: Statistics Indonesia (BPS), 2010–2018.

In terms of labour absorption, the largest sector is still the agricultural sector that absorbs 33.8% of the labour force in the district. Manufacturing makes up the second-largest absorption at 18.2%, and wholesale and retail at 17.3%. Manufacturing absorbs a larger portion of workers but their GRDP contribution is at 5.5% with a modest average growth of 3.2% in the past five years. The reason behind this could be that manufacturing in Lombok Tengah differs from that in Probolinggo. Lombok Tengah is quite heavily involved in producing handicraft, which does not involve factories but performed by women in their houses such as making bags out of rattan, or knitting scarves using traditional methods. The second-largest contributing sector to the GRDP, transport and storage, only absorbs 2.8% of the labour force. One explanation could be that Lombok Tengah's labour force might not have enough skills to enter the sector, as indicated by almost 50% of their labour force having only a primary school diploma or no education certification at all.

---

[18]The top 4 sectors based on its contribution to the Lombok Tengah District GDRP in 2018 are: agriculture (25.7%), transportation and storage (16.6%), construction (13%), and wholesale and trade (11.4%). Other sectors being lower than 5% contribution each to the GRDP.

The SMERU Research Institute

4.2 Sample Characteristics

4.2.1 Household Head Profile

The sample characteristics also include the household head profile to show the demographic situation of the main decision-maker of the household. Household heads are mainly male in Probolinggo, but this is not the case in Lombok Tengah where 37.2% of the households have a female household head. This fact may have some correlation with the numbers of widowed (15.6%) and divorced (11.6%) household heads in Lombok Tengah, which are much higher than Probolinggo (4.8% and 1.2% respectively). A previous study on child labour in Indonesia has noted that female-headed households are more vulnerable to incidences of child labour than male-headed households (Suryahadi et al., 2005).

Table 5. Household Head Profile

Household Head Profile	Probolinggo			Lombok Tengah		
	Treatment	Control	Total	Treatment	Control	Total
Sex (male, %)	92.6	92.1	**92.4**	60.3	65.8	**62.8**
Education (never attended/never finished elementary school/finished elementary school, %)	64.7	67.5	**66.0**	90.4	78.1	**84.8**
The average age of household head (in years)	45	43	**44**	46	46	**46**
Marriage status (in %)						
Married	94.1	93.9	**94.0**	69.9	76.3	**72.8**
Divorced	0.7	1.8	**1.2**	13.2	9.6	**11.6**
Widowed	5.1	4.4	**4.8**	16.9	14.0	**15.6**

Source: Calculated from HH survey, SMERU research team, 2019.

In terms of education level, more than 80% of the household heads in Lombok Tengah only attained an education level up to the primary level, in contrast to 66% of household heads in Probolinggo. In Lombok Tengah, this is mainly found in the treatment villages, compared with 78.1% in the control villages. However, both control and intervention does describe how most family household heads' education background is below junior high school, including those who have never attended school, never finished elementary school, and only finished elementary school.

Despite the similarity of the average household head's age, when broken down into age groups, Figure 5 shows that there is a larger proportion of household heads above 65 years old in Lombok Tengah than in Probolinggo. This could be explained by the fact that there are a few households which consist of grandparents and grandchildren, with the parents being absent due to migration or divorce. There was even a case where the children were raised by the grandparents because the parents divorced, remarried and built a new family. In terms of age group, there is no incidence of a child household head; the youngest male household head is 24 years old while for females it is 27 years old.
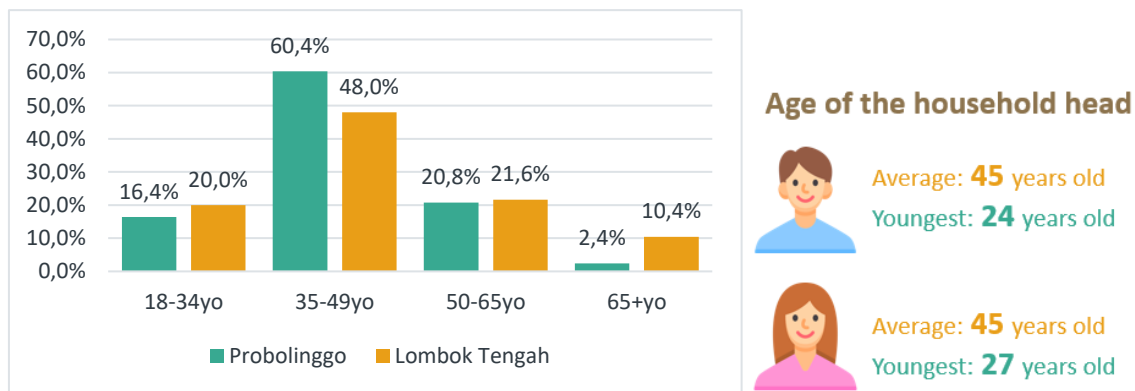
Figure 5. Household heads by age group

Source: Calculated from HH survey, SMERU research team, 2019.

4.2.2 Demographic Characteristics

In this study, there are 1,803 household members surveyed. They consist of 108 children (6%) aged 0 to 4 years, 628 children (34.8%) aged 5 to 17 years, and 1,067 adults (59.2%) aged 18 to 84. Table 6 shows the characteristics of children aged 5 to 17 years in treatment and control villages in each *kabupaten*, while Table 7 presents the adult demography of the sample. Between the treatment and control villages, school attendance appears to be relatively similar; about 90% of children are still enrolled in school. However, the number of children who are no longer enrolled differs by *kabupaten*. There is a slightly higher percentage of students in Lombok Tengah who are no longer enrolled in school, 9.9% in the treatment village and 4.8% in control villages. In contrast to Lombok Tengah, for both treatment and control villages, only about 1–2% of children in Probolinggo who are no longer enrolled in school. The majority, 60%–70% of children in the sample, are at a level where they have yet to complete primary education. The rest of the sample children have either completed primary or lower secondary education with not much disparity across treatment and control villages, apart from a small portion in Lombok Tengah who graduated from upper secondary education. These figures are confirmed by the qualitative findings. Issues related to children welfare were found to be similar across the treatment villages where the program was implemented in both *kabupaten* in 2020.

The SMERU Research Institute

Table 6. Demographic Characteristics of Children Household Members by Village Type

Demographic Characteristics		Probolinggo		Lombok Tengah		Total	
		T	C	T	C	T	C
Number of respondents (n)		163	137	182	146	345	283
Sex (%)	Female	44.2	48.2	40.1	50.7	42.0	49.5
	Male	55.8	51.8	59.9	49.3	58.0	50.5
Marital status (%)	Not married	100.0	100.0	99.5	100.0	99.7	100.0
	Married	-	-	-	-	-	-
	Divorced/widowed	-	-	0.5	-	0.3	-
School attendance (%)	Never/not yet enrolled	-	-	2.2	1.4	1.2	0.7
	Still enrolled in school	98.8	97.8	87.9	93.8	93.0	95.8
	No longer enrolled	1.2	2.2	9.9	4.8	5.8	3.5
Graduation from highest school level (%)	Never enrolled/have not completed primary	62.6	71.5	62.1	63.0	62.3	67.1
	Primary	20.9	16.8	21.4	21.9	21.2	19.4
	Lower secondary	16.6	11.7	16.5	13.0	16.5	12.4
	Upper secondary	-	-	-	2.1	-	1.1
	Tertiary	-	-	-	-	-	-

Source: Calculated from HH survey, SMERU research team, 2019.
Note: T: Treatment villages, C: Control villages.

Aside from the primary issue of children's involvement in tobacco growing, there are also issues of child marriage, school dropouts, and juvenile delinquency,[19] such as fights between students of different schools and illegal motorcycle racing. Although there is only one child in our sample that is divorced, this study also finds that 47.16% of currently married and widowed/divorced female respondents below 40 years old were married before their 18th birthday, while the percentage is only 8.03% for the males with the same marital status and age group.[20] Child marriage and early dropouts are rooted in their low economic status. The practise of child marriage is also due to cultural and religious values. Previous SMERU studies have noted that parents marry-off their children to avoid premarital sexual activities (Marshan et al., n.d.). Meanwhile, children's involvement in tobacco is rooted in the culture and lack of child-friendly spaces for children to spend their leisure time in. Therefore, aside from targeting the parents, the KESEMPATAN intervention programme also targets the children by providing after-school activities to be used as an alternative leisure platform for children.

In regard to the adult respondents, adults in Probolinggo and Lombok Tengah have different characteristics. In Lombok Tengah, roughly 37.2% of households in Lombok Tengah are headed by females,[21] a significantly high percentage of female household heads compared to Probolinggo. This correlates with high percentage of widowed/divorced adults of roughly 20% in each group of

---

[19]We did not collect quantitative data regarding juvenile delinquency.

[20]Prior to the new marriage law, Law on Marriage No. 16/2019, the minimum age for females to be married was 16 years old. Although it was legal for a girl to be married before the age of 18, it hampers the fulfillment of her rights as a child. In the new law, the minimum age is 19 for both females and males.

[21]Not shown in the table.

villages in Lombok Tengah. In education, there does not seem to be a difference in percentage in education attainment and educational completion between the treatment and control villages. However, we found that more than 30% of adults in each group of villages in Lombok Tengah have never been enrolled in school. This is further reflected in the education completion; 60% of adults in treatment villages and 56.9% of adults in control villages have never been enrolled/completed primary education. Meanwhile, there are only about 3%–4% of adults who have never been enrolled in school, and roughly 25%–27% never attended/graduated from primary school in Probolinggo. In contrast, there is a higher portion of adults in Probolinggo who have completed lower secondary and upper secondary education—more than twice of those in Lombok Tengah.

Table 7. Demographic Characteristics of Adult Household Members Based on Village Type

Demographic Characteristics		Probolinggo		Lombok Tengah		Total	
		T	C	T	C	T	C
Number of respondents (n)		328	261	260	218	588	479
Sex (%)	Female	51.5	50.6	61.9	59.6	56.1	54.7
	Male	48.5	49.4	38.1	40.4	43.9	45.3
Marital status (%)	Not married	8.8	8.0	5.8	4.6	7.5	6.5
	Married	82.9	83.9	70.4	76.6	77.4	80.6
	Divorced/widowed	8.2	8.0	23.8	18.8	15.1	12.9
School attendance (%)	Never/not yet enrolled	2.7	4.2	39.2	34.4	18.9	18.0
	Still enrolled in school	1.8	1.5	1.2	0.5	1.5	1.0
	No longer enrolled	95.4	94.3	59.6	65.1	79.6	81.0
Graduation from highest school level (%)	Never enrolled/not completed primary	25.3	27.6	60.0	56.9	40.6	40.9
	Primary	34.8	38.7	23.5	17.4	29.8	29.0
	Lower secondary	16.8	16.9	9.2	14.2	13.4	15.7
	Upper secondary	20.7	15.3	6.2	9.2	14.3	12.5
	Tertiary	2.4	1.5	1.2	2.3	1.9	1.9

Source: Calculated from HH survey, SMERU research team, 2019.
Note: T: Treatment villages, C: Control villages.

4.2.3 Disability and Health Statuses

A disability is the existence of limitations of function that last a long time and causes limited participation in society. Moreover, some types of disabilities cannot be detected from physical appearance. Such disabilities include behavioural and emotional disturbances, as well as difficulties in remembering and in concentrating, communicating, and taking care of oneself. We adopted The Washington Group Short Set of Disability Questions (2016), which assesses whether the respondent has a disability based on their responses to questions that aim to assess difficulties in conducting universal basic activities rather than by asking them to identify their disability.

There are 324 adults (30.4%) and 70 children (11.15%) who reported at least one difficulty during the survey. Based on Figure 6, the percentage of respondents with difficulties are significantly higher in the adult group. For both treatment and control villages, the most reported difficulties

among adults are: (i) in seeing even when using glasses (average age 54 years old); (ii) in walking or taking the stairs (average age 55 years old); (iii) in memorizing or concentrating (average age 49 years old); and (iv) in controlling emotions and behaviours (average age 47 years old). For other forms of difficulties, the reports are less than 6% in each category. Meanwhile, for both treatment and control villages, the most reported difficulties among children are: (i) in controlling emotions and behaviours (average age 10.5 years old); and (ii) in memorizing or concentrating (average age 12 years old).[22] There is a slightly higher percentage of children with a difficulty in controlling their emotions in the treatment villages. Meanwhile, roughly 3% of child respondents in the control villages reported some difficulty in hearing. Among those with difficulties, there is one child with an intellectual disability in Probolinggo.
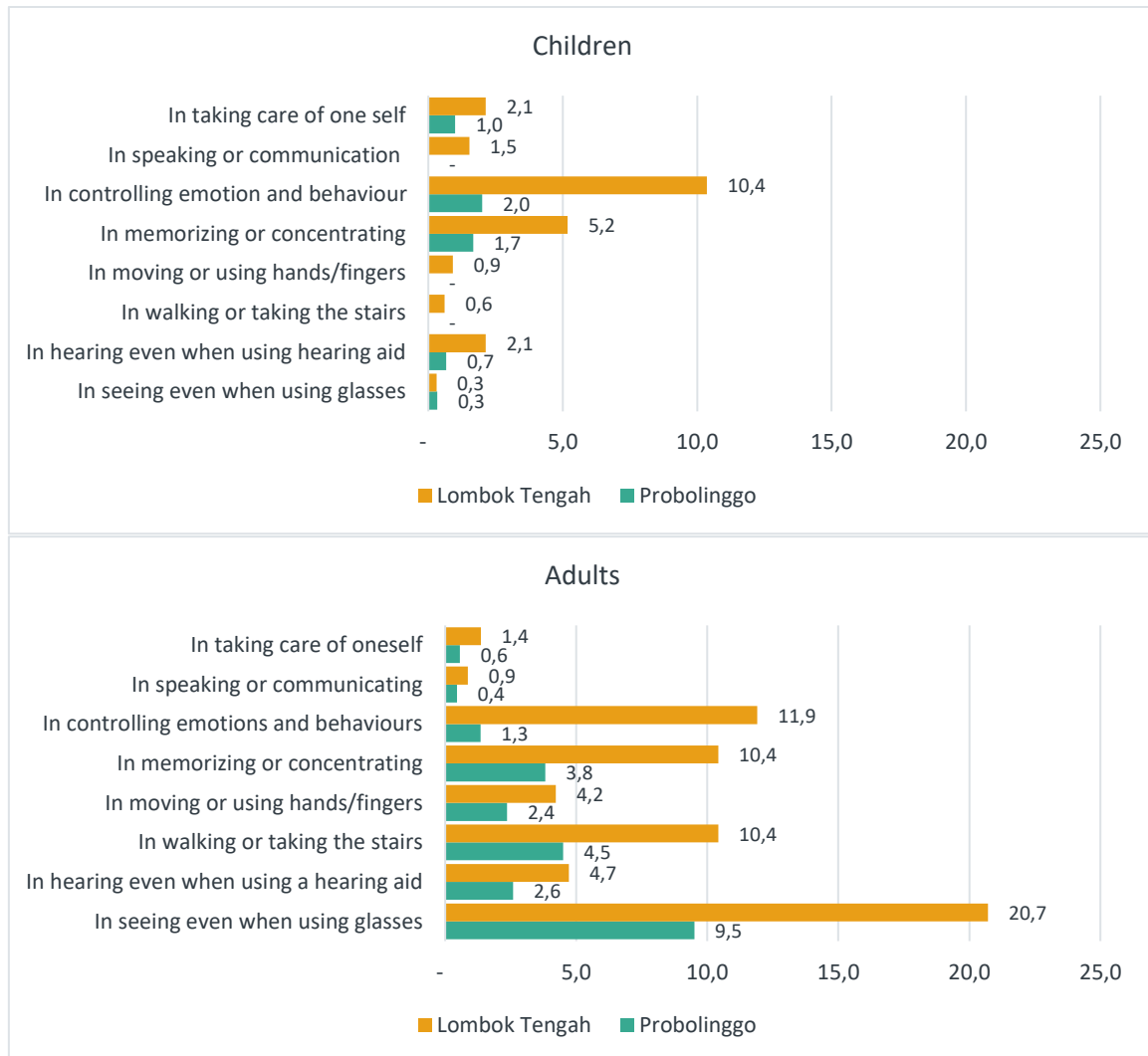
Figure 6. Percentage of respondents with disabilities
Source: Calculated from HH survey, SMERU research team, 2019.
Note: Based on 628 child respondents aged 5–17 years old and 1,067 adult respondents aged 18–84 years.

There are 62.7% of respondents who reported at least one ailment within one month prior to the survey. The proportions are 30.7% of adults and 46.7% of children. The most reported ailments by

---

[22]Since the children were represented by adults, there might be a bias due to adults' expectations of the children's behavior and capabilities which were not met in the answer choices.

the adults are headache (39.9%), excessive fatigue (30.3%), and fever (20.2%), while the most reported ailment by the children is fever (30.3%). Among those with ailments, 63.2% visited a health clinic or saw a health provider to get medication. The respondents mainly visit village midwives (29.3%) or a community health centre (*puskesmas,* 23.8%). Meanwhile, 50.2% of the respondents who did not go to the health clinic or see a health officer said that they just needed to rely on self-medication, 30.5% considered it unnecessary, and 14.2% respondents said that it was because they did not have money for medicine. We also asked regarding the respondents' chronic illnesses or non-communicable diseases. Most children do not have any illnesses or diseases (92.8%), but there are children who suffer from typhoid and asthma. Meanwhile, there are 25.02% of adults with illnesses or diseases. The most-reported ones are rheumatoid arthritis (usually due to contact with water for a long duration while working in the plantation field), hypertension, and asthma.
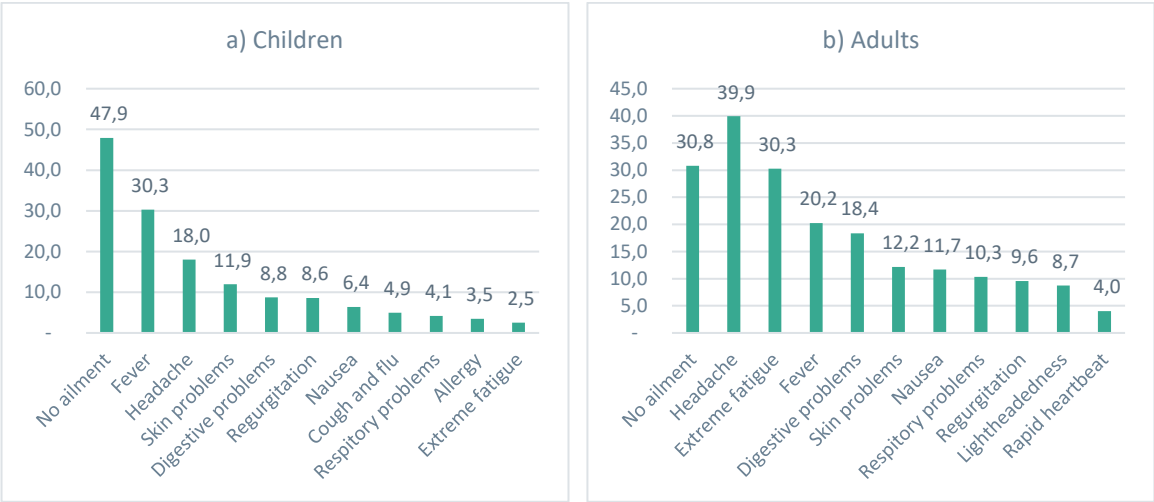
Figure 7. Percentage of respondents' ailments (multiple answers)
Source: Calculated from HH survey, SMERU research team, 2019.
Note: Based on 628 child respondents aged 5–17 years old and 1,067 adult respondents aged 18–84 years.

4.2.4 Overall Employment

The post-harvesting tobacco phase already ended when the household survey started in December 2019, and the respondents were working on other commodities or sectors while waiting for the start of the rice planting season in January 2020. Within one week prior to the survey, many children were in school and/or doing housework, while the adults were working and/or doing housework. Figure 8 (right) also shows that 95% of children aged 5–12 years old only attended school, and no one was only working. Meanwhile, 11.5% of children aged 13–17 years old attended school and also worked, while 6.5% were only working, and 8% were only doing housework or other activities. In this section, we elaborate the employment characteristics of the all individuals who are currently in employment within one week prior to the survey, consisting of 53 children and 664 adults. More elaborate information and analysis regarding children's involvement in employment and housework are presented in the next chapter.
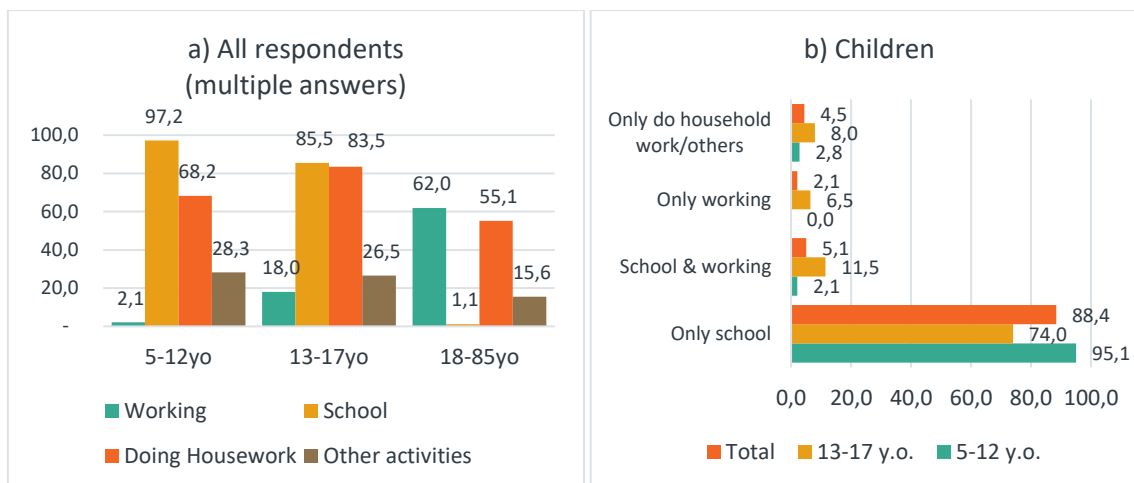
Figure 8. Percentage of respondents' activities in one week prior to the survey

Source: Calculated from HH survey, SMERU research team, 2019.

Note: Based on 1,693 respondents aged 5–84 years. Respondent count for each age group: 428 (5–12 y.o.), 200 (13–17 y.o.), 316 (18–34 y.o.), 494 (35–49 y.o.), 177 (50–65 y.o.), and 78 (65+ y.o.).

The survey results show the differences in the economic sectors of respondentsin Probolinggo and in Lombok Tengah. In Probolinggo, 47.1% of respondents were working in the agriculture sector, consisting of animal husbandry such as raising cattle (16.7%), food crop agriculture such as preparing for rice season or harvesting the corn (13.5%), horticulture such as growing or harvesting chili (5.2%), and other activities. However, it is slightly different in Lombok Tengah where 50.9% of respondents, mostly female, were producing handicrafts, such as woven fabric, rattan handbags, and pottery. On the other hand, 42.7% of male individuals in Lombok Tengah were working in the construction sector. Overall, only 9.8% of respondents in Lombok Tengah were working in the agriculture sector. In terms of village types, Figure 9 shows that there is not much of a difference in the distribution of economic sectors in Probolinggo across the two types of villages. However, the distribution of main economic sectors is slightly different between control and treatment villages in Lombok Tengah. The proportion of respondents who were working in the manufacturing sector reaches 55.4% in the treatment villages, followed by the construction sector and the agriculture sector. On the other hand, the proportion of those working in the manufacturing sector only reaches 44.6% in the control villages, followed by construction sector and trade sector, while the percentage for the agriculture sector is only 6.2%.
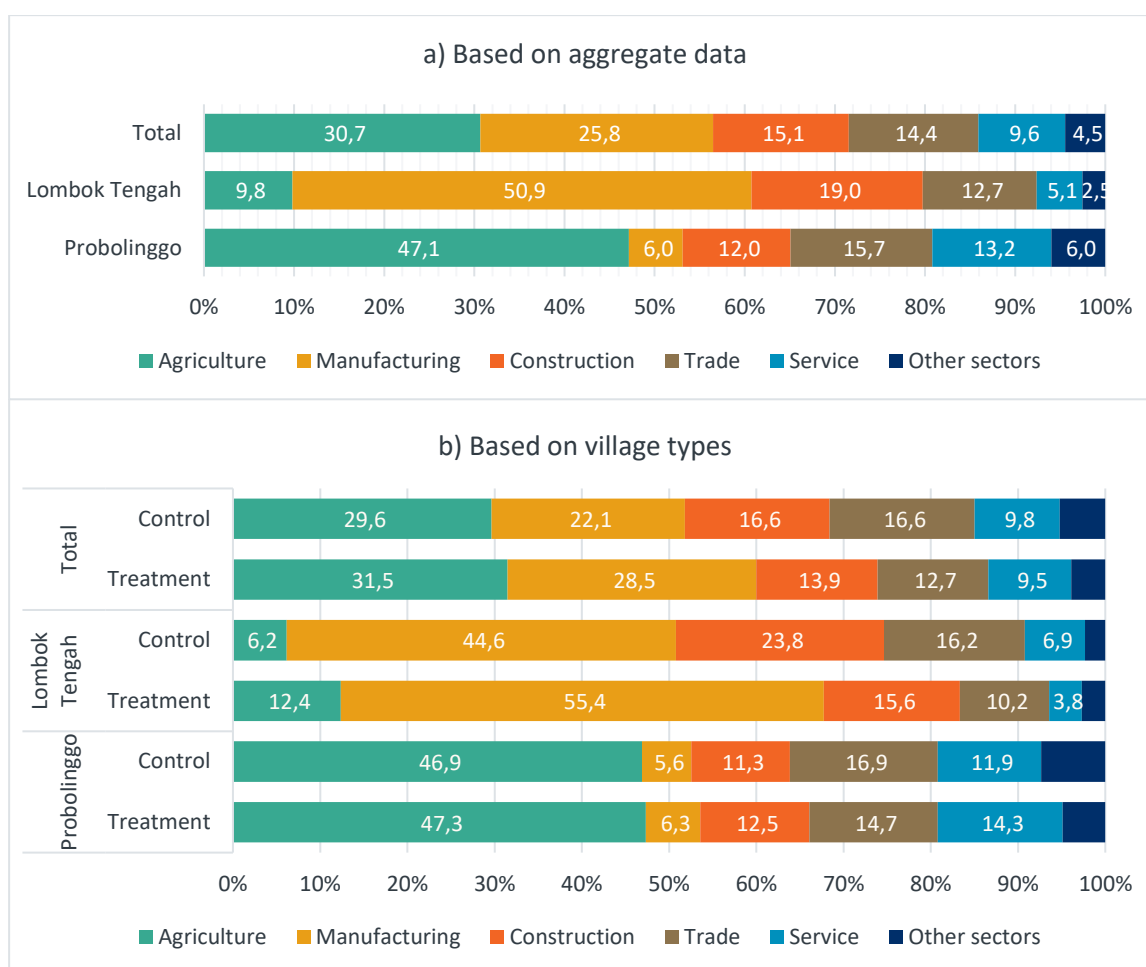
Figure 9. Proportions of respondents' main economic sectors in one week prior to the survey

Source: Calculated from HH survey, SMERU research team, 2019.

Note:

1) Based on 717 respondents age 5–84 years who were working within one week prior to the survey.

2) Agriculture sector includes horticulture, tobacco growing, animal husbandry, and fisheries.

3) Other sectors include mining, provision of electricity and clean water, transportation, information, and financial services.

Tobacco growing season starts after the end of the rice harvest season, and there are 1,065 respondents who were working or helping during tobacco session in 2019. Out of those respondents, 14.1% are tobacco farmers, 85.6% are farm workers, and 0.3% are unclassified[23]. Among 150 respondents who were tobacco farmers,[24] 19 of them (12.7%) reported income loss, and 52 of them (34.7%) only gained less than 2 million rupiah (USD 142.8) of profit at the end of tobacco season in 2019. According to the farmers, the extended dry season in 2019 resulted in longer tobacco season, greater tobacco production quantity, but also resulted in oversupply in the market that leads to the price drop.[25] Around 70% of respondents said the last time they worked in tobacco was three months ago, which was in September 2019. Figure 10 shows that in general, 83%

---

[23]There are three respondents who cannot be classified as farm workers because they work by themselves, and only collect the left-over tobacco leaves and then sell them.

[24]There are also three farmers who reported that they are currently in a partnership with a tobacco company, but only one farmer in Lombok Tengah has a direct-written contract with a company.

[25]We did not collect data regarding the tobacco price and other recent issues. We encountered this information during household survey, but it was not administered in the instrument.

of respondents who worked in tobacco were involved in the post-harvesting phase. Figure 10 also clearly shows the involvement of children peaked during this phase. Children in Proboliggo mainly help on arranging and folding tobacco leaf rolls (*aleppèt*), arranging chopped tobacco leaves (*nampangè*), and transporting the leaves to the storage area. In Lombok Tengah, children mainly help in tying tobacco leaves (*gelantang*) before putting them in the oven and in untying the bundles (*belekak mako*) afterwards. For doing these jobs, 59.2% of children[26] receive less than 200 thousand rupiah (USD 14.3) in a month. On the other hand, the activities in the seedling up to the harvesting phase are mainly conducted by adults. Although the amount varies with regards to job position and duration, 70% of adult farm workers receive less than 1 million rupiah (USD 71.4) in a month.

	5-12 y.o.	13-17 y.o.	18-65 y.o.	Total
■ seeding	2,0	6,6	26,1	20,8
■ planting	2,0	19,8	60,8	48,5
■ maintenance	9,5	37,7	63,4	53,3
■ harvesting	6,8	33,0	71,9	59,0
■ post-harvesting	96,6	86,8	80,5	83,4
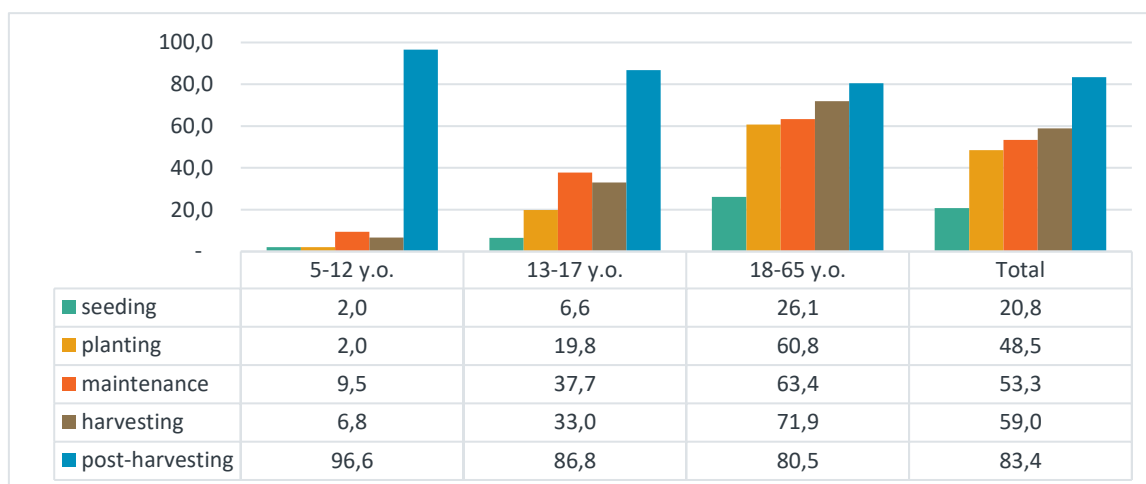
Figure 10. Proportions of respondents' involvement in tobacco-growing phases

Source: Calculated from HH survey, SMERU research team, 2019.

Note: Based on 1,066 respondents who worked in tobacco growing in 2019. Respondent count for each age group: 149 (5–12 y.o.), 106 (13–17 y.o.), 230 (18–34 y.o.), 405 (35–49 y.o.), 136 (50–65 y.o.), and 40 (65+yo).

---

[26]There are 254 children who work in tobacco growing, and 44 of them are unpaid family workers. This number should be read as 59.2% out of 210 children aged 5 to 17 years who work in tobacco-related activity and receive wage.

V. SITUATION OF CHILD LABOUR

This section elaborates the child labour prevalence among tobacco households of the study area, as well as the child labour's characteristics and employment condition. This section also provides information regarding the involvement of children aged 5–17 years old in domestic work, and the household members' perspective and knowledge regarding child labour.

5.1 Prevalence of Working Children and Child Labour

Many working children in the tobacco households were only working during tobacco session, especially in the post-harvesting stage. To support this notion, we show the comparison of children's employment status between two time references (TR): within one week (TR: 1 Week) and within six months (TR: 6 Months) prior to the survey in December 2019 (Figure 11).[27] We set the time reference up to the maximum of six months to be able to capture the children's involvement during the post-harvesting phase, taking place between August and November 2019. However, there is a potential recall bias if the children's last work was more than one week prior to the survey. Among 628 children aged 5–17 years in tobacco households, there are only 8.4% of children who were working within one week prior to the survey in December 2019. The prevalence is up to 44.3% of children if we count all children who were working within six months prior to the survey, which was between July and December 2019. Figure 11 shows that the prevalence of working children between treatment and control villages slightly differs. Within one week prior to the survey, the treatment villages' working labour prevalence is 9.6%, which is higher than the control villages' prevalence.
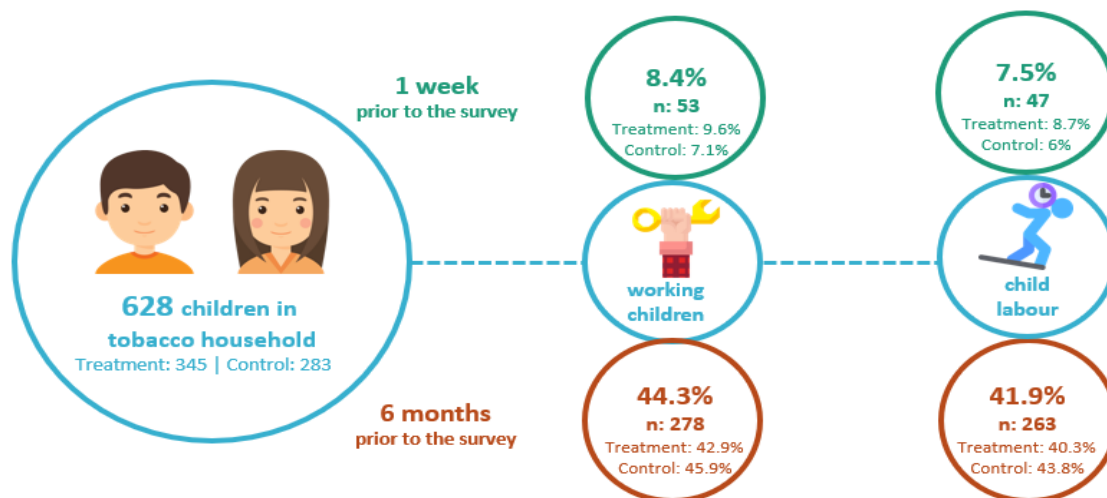
Figure 11. Prevalence of working children and child labour among tobacco households

Source: Calculated from HH survey, SMERU research team, 2019.

Note: The percentages are based on 628 children aged 5–17 years in tobacco households: 345 children from treatment villages and 283 children from control villages. All child labourers are in hazardous works.

---

[27]We calculate the children's employment status in two time references based on two considerations. First, as the survey was conducted after the tobacco season ended, we had an advantage to understand the situation of children's employment outside the tobacco season which is within one week prior to the survey. Second, we would also capture the children's involvement during the tobacco season. However, it is important to note that there is a potential recall bias from the children if the time reference is more than one week before the survey.

Many working children face a situation at work that might be hazardous for them, such as working for more than 40 hours a week, using dangerous tools and machineries, or being exposed to hazardous substances or conditions at work. These situations led the working children to be categorized as child labour.[28] Among the tobacco households, the child labour prevalence is 7.5% within one week prior to the survey and 41.9% within six months prior to the survey. The child labour prevalence between the two-time references has a 2.7% difference in the treatment villages and a 3.5% difference in the control villages. The control villages have a lower child labour prevalence within one week prior to the survey in December 2019. It is important to note that the prevalence of child labour in hazardous work is the same with the prevalence of child labour in general because these children are categorized as child labourers mainly due to their involvement in hazardous activities or work situations.

Although the highest child labour prevalence is among children aged 15–17 years old, yet the prevalence among children aged 5–12 years old is also relatively high within six months prior to the survey. Figure 12 shows that during the tobacco off-season, the child labour prevalence of children aged 5–12 years old is less than 2% in both treatment and control villages. In contrast, the prevalence almost reaches 30% in the treatment villages and 40% in the control villages within six months prior to the survey. This indicates that many children aged 5–12 years old were only working during the post-harvesting phase of tobacco growing. Meanwhile, the child labour prevalence of children aged 15–17 years old in both treatment and control villages is relatively similar within one week prior to the survey but has a discrepancy of 8.6% within six months prior to the survey.
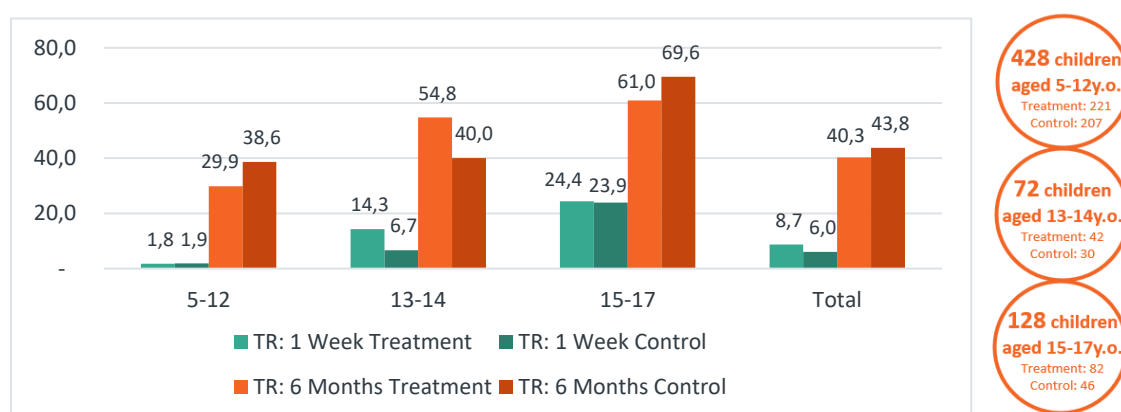
Figure 12. Prevalence of child labour among tobacco households based on age group

Source: Calculated from HH survey, SMERU research team, 2019.

Note: The percentages are based on the number of children in each of the age groups. TR: Time reference.

When we disaggregate the child labour prevalence based on the study districts, Probolinggo and Lombok Tengah, we find that child labour prevalence among tobacco household varies across districts and time references (Figure 13). In general, Lombok Tengah has a higher child labour prevalence than Probolinggo. The child labour prevalence in Probolinggo is 5% and in Lombok Tengah is 9.8% within one week prior to the survey. However, the child labour prevalence is 10.7% in Probolinggo and 70.4% in Lombok Tengah within six months prior to the survey, which also includes the post-harvesting stage of tobacco growing. On the one hand, the prevalence between the treatment and control villages in Probolinggo is relatively the same. On the other hand, the prevalence in Lombok Tengah's control villages is noticeably higher within six months prior to the

---

[28]See chapter 2 for the definition of child labour.

survey. These numbers confirm the high demand of child labourers during the tobacco harvest stage, and that the job in tobacco growing is only temporary.
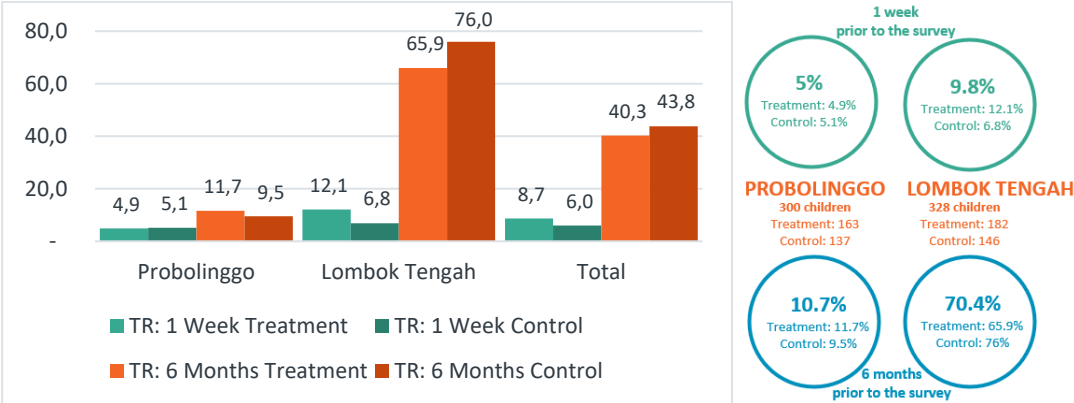
Figure 13. Prevalence of child labour among tobacco households based on village types (%)

Source: Calculated from HH survey, SMERU research team, 2019.
Note: TR: Time reference.

5.2 Characteristics of Child Labour

To gain a better understanding of children engaged in child labour, we explored the children's characteristics and their employment statuses. We use comparisons between non-working children and child labourers within one week and six months prior to the survey. There is a possibility that child labourers who were working within one week prior to the survey were permanent child labourers, even though the numbers are small, 30 children in treatment villages and 17 in control villages.

Table 8. Characteristics of Child Labour

Characteristics		Child Labour TR: 1 Week		Child Labour TR: 6 Months	
		T	C	T	C
Number or respondents (n)		**30**	**17**	**139**	**124**
Sex (%)	Female	46.7	35.3	40.3	51.6
	Male	53.3	64.7	59.7	48.4
Age group (%)	5–12 y.o.	13.3	23.5	47.5	64.5
	13–14 y.o.	20.0	11.8	16.5	9.7
	15–17 y.o.	66.7	64.7	36.0	25.8
School attendance (%)	Never/not yet enrolled in school	-	-	1.4	1.6
	Still enrolled in school	73.3	64.7	85.6	91.1
	No longer in school	26.7	35.3	12.9	7.3
Living with biological parents (%)	Without both parents	3.3	5.9	13.7	21.8
	With one parent	43.3	23.5	38.8	25.0
	With both parents	53.3	70.6	47.5	53.2

Source: Calculated from HH survey, SMERU research team, 2019.

Note: 1) The percentages are calculated to each category's number of respondents.

    2) T: Treatment villages, C: Control villages, TR: Time reference.

As we can see from Table 8, the number of child labourers who worked within one week prior to the survey are significantly lower than those who worked within six months prior to the survey. In terms of age group, in each type of villages, around 65% of child labourers working within one week prior to the survey belong to 15–17 years old age group. However, among those working within six months prior to the survey, the majority of child labourers are in the 5–12 age group[29]—47.5% in the treatment villages and 64.5% in the control villages. One possible reason behind this is because many younger children (aged 5–12 years old) are only involved in the post-harvesting phase,[30] which took place roughly within 6 months prior to the survey.

Much attention is also given to the issue of child labourers' education, as working might hinder the children's opportunity to attend school or force them to leave school prematurely (ILO, 2007: 17). Table 8 also shows that although most child labourers were working within one week prior to the survey, they were also attending school (73.3% in the treatment villages and 64.7% in the control villages). However, it also means that almost one-third of the child labourers are no longer in school. Control villages seems to have more school dropouts than the treatment villages (35.3% in the control villages and 26.7% in the treatment villages) for child labour within one week prior to the survey, though the difference and sum of school dropouts are not as apparent in the six months prior to the survey. Within the six months prior to the survey, more child labourers were also still enrolled in school, reaching a figure of 85% for treatment villages and 91% for control villages.

Table 9. Prevalence of Child Labour Based on School Enrolment Statuses

Children's Enrolment Status		Child Labour TR: 1 Week		Child Labour TR: 6 Months	
		T	C	T	C
Children who are in school (n)		**22**	**11**	**119**	**113**
Highest enrolment still in school (%)	Preschool	-	-	-	2.7
	Elementary school	22.7	18.2	53.8	54.9
	Junior high school	31.8	36.4	24.4	24.8
	Senior high school	45.5	45.5	21.8	17.7
Children who are no longer in school (n)		**10**	**5**	**26**	**20**
Highest enrolment no longer in school (%)	Elementary school	-	-	22.2	-
	Junior high school	87.5	83.3	72.2	66.7
	Senior high school	12.5	16.7	5.6	33.3

Source: Calculated from HH survey, SMERU research team, 2019.
Note: 1) The percentages are calculated to the number of n children.
         2) T: Treatment villages, C: Control villages, TR: Time reference.

We try to enrich the information by looking at the prevalence based on the children's school enrolment status in Table 9. This figure includes three children who are at the preschool level and helping their parents tie tobacco leaves even though it is for less than one hour. The prevalence of elementary school students engaged in child labour reached 53% and 55% in the treatment and control groups respectively within 6 months prior to the survey. The rate declined to around 20% in each village group within one week prior to the survey. This is in line with what Table 8 has

---

[29]The higher number of elementary-school children in our sample might be due to the culture in both areas, in which children usually pursue their secondary education in religious boarding schools. Thus, we were unable to conduct interviews with those children.

[30]There are 91 children aged 5–12 years whose last work was in September.

demonstrated regarding the 5–12 age group's involvement as child labourers within the six months prior to the survey. Similarly, in Table 9, children aged 15–17 years old are the majority of child labourers one week prior to the survey, and thus so are prevalences of the junior and senior high school child labour one week prior to the survey. Around 70% of child labourers are enrolled in either the junior or senior high school level, while only about 40% of child labourers are in the junior or senior high school level six months prior to the survey.

For both time frames and village types, most children who are no longer in the school have at least graduated from junior high school, roughly around 85% one week prior to the survey and 70% six months prior to the survey. The rest of the school dropouts have graduated from senior high school. One group of child labourers being the exception consists of six children who discontinued schooling after obtaining an elementary school diploma. They account for 22% of the child labourers in the treatment group within six months prior to the survey. Some of the main reasons for not attending school are lack of financial capability (n=17), having no interest in school/laziness/having been swayed by friends who had already dropped out from school (n=10), marriage (n=2), and to earn income (n=1).
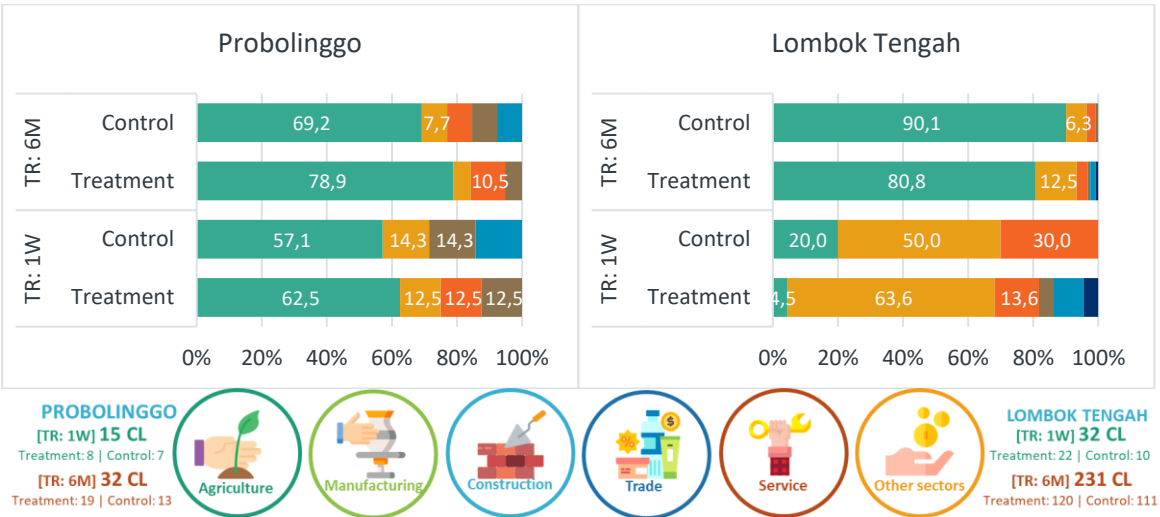
Figure 14. Distribution of child labour by economic sector
Source: Calculated from HH survey, SMERU research team, 2019.
Note: The percentage is based on the number of child labourers in each of districts and time references (TR).

This baseline study also finds that employment in Probolinggo and Lombok Tengah has different characteristics in terms of the economic sectors. Both treatment and control villages also show similar patterns of the economic sectors' distribution in the two study districts. In Probolinggo, agriculture is the main sector for child labourers in both village types and time references. Meanwhile, in Lombok Tengah, Figure 14 shows that the manufacturing sector is the main sector within one week prior to the survey, with up to 80.8% of child labourers in treatment villages and 90.1% in control villages. In Lombok Tengah, child labourers in the manufacturing sector were making woven fabric, rattan bags, and pottery. Other than agriculture and manufacturing, there are many child labourers who work in construction and trade. In the next subchapters, we will explore more information on child labour in tobacco growing and in other sectors.

5.2.1 Child Labour in Tobacco Growing

There is a high prevalence of child labourers in tobacco growing in comparison to child labourers in other sectors. This study finds that 40.4% from 628 children aged 5–17 years in tobacco households were working in tobacco-growing. The prevalence of child labour in tobacco households who are working in the tobacco growing is 5.4% within one week prior to the survey and 39.5% within six months prior to the survey. This is possible because of three reasons, according to Hermanus et al. (2018). First, the prevalence in this study is measured among tobacco households in which at least one adult household member was working in tobacco growing in 2019. Households in tobacco growing communities use children's involvement in tobacco growing as a way to teach the values of hard work. Second, tobacco growing has more cultivation stages than other agricultural commodities. There is a lack of innovative technology in the stages, and some stages are deemed menial and light that children will easily learn how to do it. Third, the farmers must process the tobacco leaves immediately to maintain its condition; hence, there are high demands for labourers in the post-harvesting phase and high involvement of child labourers.

Children are involved in various tobacco-growing phases with highest child labour prevalence in the post-harvesting phase. Figure 15 shows that the child labour prevalence during the post-harvesting phase in the treatment villages is 34.8%, slightly lower than the prevalence in the control villages. It is also reflected in the child labourers' average age, which is 12 years old in the treatment villages and 11 years old in the control villages. In the post-harvesting phase, 36.4% of tobacco child labourers in Probolinggo were involved in curing the fine-chopped tobacco leaves (*jemur*) and 85% of tobacco child labourers in Lombok Tengah were involved in tying tobacco leaves (*bergelantang*). The post-harvesting activities are different due to different types of tobacco and its curing process: the tobacco leaves are sun-cured in Probolinggo and flue-cured in Lombok Tengah. Figure 15 also shows that the child labourers were also involved in the maintenance and harvesting phases, but the prevalence is lower than 10%. The average age of child labourers who were involved in these phases is 14 years old in both the treatment and control villages, indicating many children aged 5–12 years old were only involved in the post-harvesting phase.
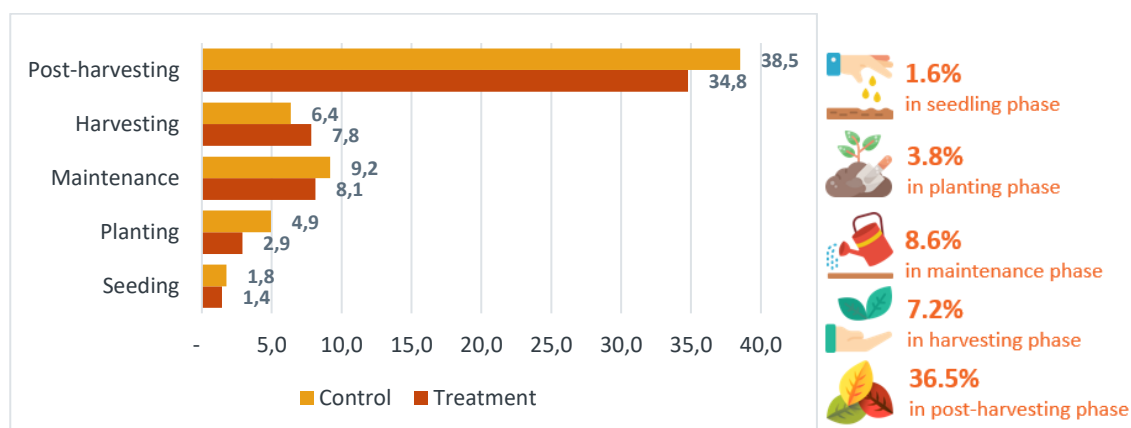
Figure 15. Child labour prevalence based on tobacco-growing phases
Source: Calculated from HH survey, SMERU research team, 2019.
Note: 1) The percentage of child labour is based on the total number of child labour in tobacco growing (n=248)
2) The child labour prevalence is based on the total number of children aged 5–17 years (n=628).

There are also different employment statuses between child labourers in Probolinggo and Lombok Tengah; 68.2% of child labourers in Probolinggo worked as family labour for their parents or relatives, while 79.2% of child labourers in Lombok Tengah work for non-family employers. Both the treatment and control villages in each study district also have similar distribution. The different

employment statuses might be correlated with different production capacities. In Probolinggo, the size of tobacco a plantation area ranges from 60 m^2 to 600 m^2, with an average of 260 m^2, thus the farmers usually only involve their own household members or close neighbours. Meanwhile, in Lombok Tengah, the size of a tobacco plantation area ranges from 200 m^2 to 20,000 m^2, with the average being 6,000 m^2. Since the production capacity is much higher in Lombok Tengah, the farmers need more labourers, who may come from the neighbouring community and may include children. Based on an ethnographic study in Lombok Island, Amigo (2010) found that the farmers need to produce tobacco with as minimal cost as possible, so children are involved because they are cheaper to hire (Amigo, 2010: 39).

Figure 16. Employment statuses of child labour in tobacco growing

Source: Calculated from HH survey, SMERU research team, 2019.

Note: The percentages of employment statuses are based on the number of child labourers in tobacco growing in Probolinggo (n=22) and Lombok Tengah (n=226).

Children's involvement in employment is often associated with economic benefits, but child labourers in Probolinggo and Lombok Tengah have different reasons. . As seen in Figure 17, 63.6% of child labourers in Probolinggo said that the main reason is their self-willingness to help their family and 13.6% is because they are ordered or offered to work by their family. In contrast, 69% of child labourers in Lombok Tengah said that their main reason for working in tobacco-growing activities is to earn income. This also explains why the prevalence of child labour is remarkably high in Lombok Tengah. An ethnographic study by Amigo (2010) also found that in Lombok, children are expected to take the responsibility in doing household work or agricultural work when they are old enough to communicate and walk around the village independently. The children, especially those from poor households, also have a sense of responsibility towards the household economy (Amigo, 2010: 4–41). Table 10 shows the average monthly income for a child labourer is Rp267,000 (USD 19.08) and child labourers in Lombok Tengah have higher income than those in Probolinggo. In terms of payment, 92.7% of child labour are paid daily. Regarding the payment method, 71.4% of child labourers are paid based on their completion of work that day and 25.7% of child labourers are paid on a daily or hourly basis.
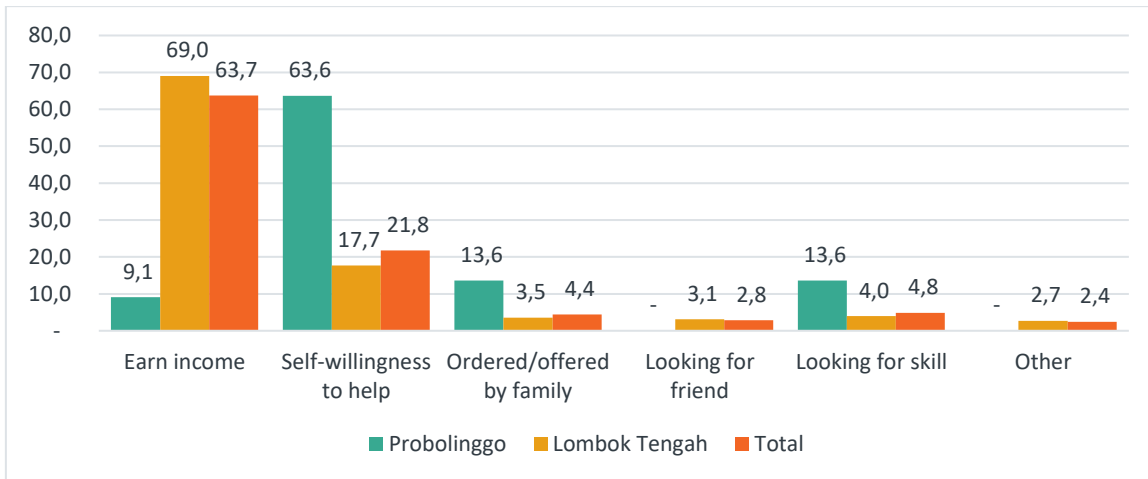
Figure 17. Main reason for working in tobacco growing (%)

Source: Calculated from HH survey, SMERU research team, 2019.

Note: The percentages of employment statuses are based on the number of child labourers in tobacco growing in Probolinggo (n=22) and Lombok Tengah (n=226).

Child labourers also work fewer hours than the adult workers. Figure 18 shows that many child labourers worked less than 3 hours a day, although there are also more than 30% of child labourers who worked more than 4 hours a day. Table 10 also shows that on average, the child labourers worked for 3 hours a day and 4 days a week. Child labourers in older age groups also have longer working hours, but not necessarily more working days.
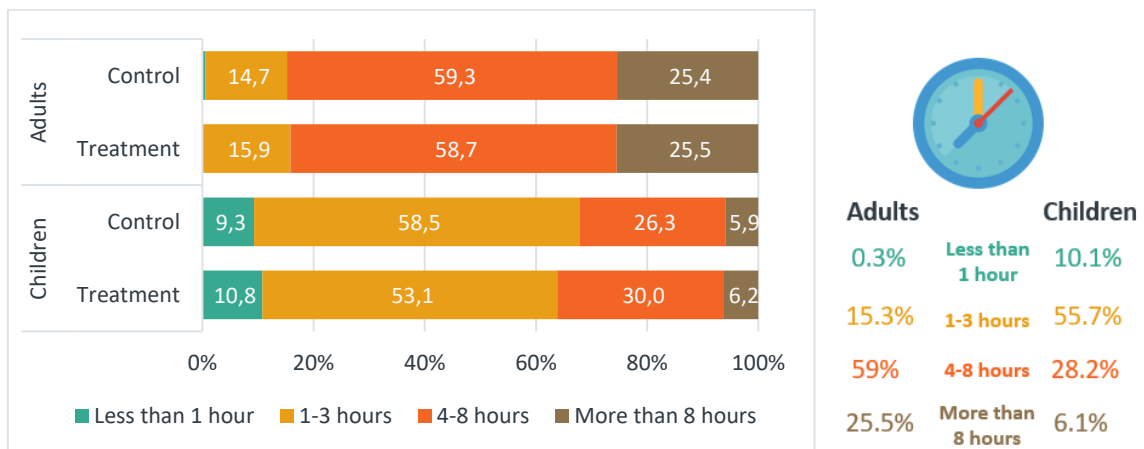
Figure 18. Working hour of adult worker and child labour in tobacco-growing

Source: Calculated from HH survey, SMERU research team, 2019.

Note: The percentages of usual working hours in a day are based on the number of adults working in tobacco growing (n=770) and on the number of child labour (n=248).

Table 10. Average Income, Working Hours, and Working Days of Child Labourers and Adult Workers in Tobacco Growing

Average Income, Working Hours, and Working Days		Probolinggo	Lombok Tengah	Total
The average income in a month (in thousand Rupiah)	5–12 y.o.	42.6 ≈ $3.04	154.3 ≈ $11.02	150.9 ≈ $10.78
	13–14 y.o.	106.7 ≈ $7.62	389.4 ≈ $27.81	359.1 ≈ $25.65
	15–17 y.o.	281.3 ≈ $20.09	511.5 ≈ $36.54	477.4 ≈ $34.10
	Children	219.2 ≈ $15.65	270.1 ≈ $19.29	267.1 ≈ $19.08
	Adults	591.2 ≈ $42.23	905.3 ≈ $64.67	762.5 ≈ $54.46
Average working hours in a day	5–12 y.o.	1	2	2
	13–14 y.o.	2	4	4
	15–17 y.o.	3	5	5
	Children	2	3	3
	Adults	5	8	6
Average working days in a week	5–12 y.o.	3	4	4
	13–14 y.o.	2	4	4
	15–17 y.o.	3	4	4
	Children	3	4	4
	Adults	5	6	5

Source: Calculated from HH survey, SMERU research team, 2019.
Note: Using USD 1 = IDR 14.000,00 as exchange rate in December 2019 (survey time).

5.2.2   Child Labour in Other Sectors

There are 64 children working in sectors other than the tobacco sector. Of that number, 40 children are working in tobacco-growing activities within six months prior to the survey.[31] Of the 64 children, 54 are classified as child labourers. There were 16 child labourers in Probolinggo and 38 child labourers in Lombok Tengah. Child labourers in the agriculture sector work or help their families in collecting grass for their cattle's consumption, watering or harvesting horticulture crops, or even working on the tractor to plough the rice fields. Child labourers in the industrial sector produce food, woven fabric, rattan-based bag, pottery, and other goods. Some child labourers are also involved in building houses, selling food or other goods, or even performing as a vocalist or musician. In terms of job status, 46.3% of child labourers are unpaid family child workers.

---

[31]In this subchapter, we also use one-time reference, which is within six months prior to the survey.

The SMERU Research Institute

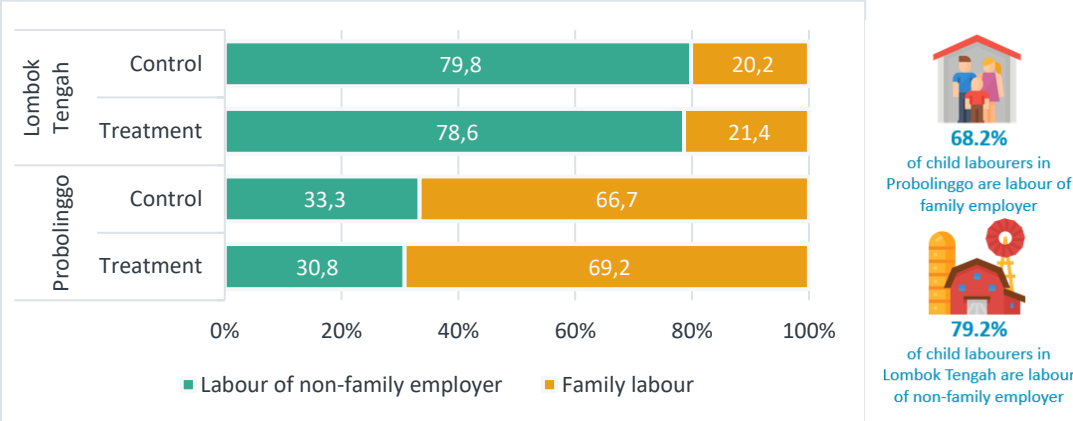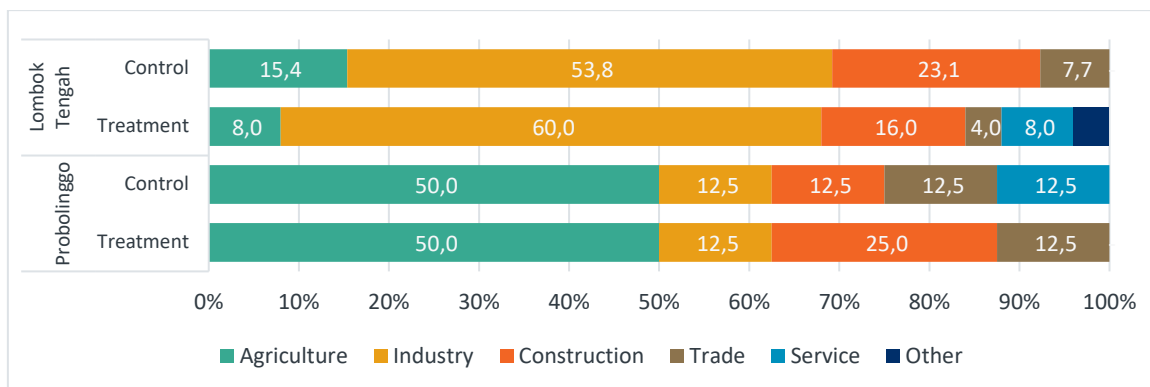**Figure 19. Child labour in economic sectors other than tobacco growing**

Source: Calculated from HH survey, SMERU research team, 2019.

Notes: The percentages are based on the number of child labourers in other sectors: 16 children in Probolinggo and 38 children in Lombok Tengah.

In terms of job status, 46.3% of child labourers are unpaid family child workers. Older children (15–17 y.o.) are the ones that have more involvement in other sectors. Table 11 shows the average income, working hours, and working days. However, it is important to note that there is only 1 child labourer in the 5–12 age group and 2 child labourers in the 13–14 age group in Probolinggo. The average income for older child labour reaches almost Rp600,000 a month (USD 42.86), with an average of 4 working hours in a day and 5 working days in a week. We can also see that the child labourers in Lombok Tengah work longer hours and more days than child labourers in Probolinggo.

**Table 11. Average Income, Working Hours, and Working Days
of Child Labour in Other Sectors**

Average Income, Working Hours, and Working Days		Probolinggo	Lombok Tengah	Total
The average income in a month (in thousand Rupiah)	5–12 y.o.	-	90.0 ≈ $18.1	90.0 ≈ $18.1
	13–14 y.o.	60.0 ≈ $4.3	487.5 ≈ $31.3	402.0 ≈ $27.4
	15–17 y.o.	637.5 ≈ $21.4	767.3 ≈ $45.9	732.7 ≈ $43.2
	Children	522.0 ≈ $15.7	621.8 ≈ $36.8	599.1 ≈ $34.8
Average working hours in a day	5–12 y.o.	1	2	2
	13–14 y.o.	2.5	4	4
	15–17 y.o.	3.5	5	5
	Children	3	4	4
Average working days in a week	5–12 y.o.	1	3	3
	13–14 y.o.	3	5	5
	15–17 y.o.	5	5	5
	Children	5	5	5

Source: Calculated from HH survey, SMERU research team, 2019.

Notes: 1) The average income is based on the number of child labour in other sectors who receive wages: 5 children in Probolinggo and 17 children in Lombok Tengah.

2) The average working hour and working day are based on the number of child labour in other sectors: 16 children in Probolinggo and 38 children in Lombok Tengah.

3) Using USD 1 = IDR 14.000,00 as exchange rate in December 2019 (survey time).

5.3 Occupational Risks of Child Labour

Not many children aged 5–17 years old realize that their job could lead to risks for their health and safety. In this subchapter, we start by showing the percentages of child labourers' involvement in tobacco-growing activities. Then, we provide a comparison of the occupational risks and consequences between child labour in the tobacco sector and child labour in other sectors. Involvement in tobacco-growing activities is considered unsafe for children (ILO, 2009; 2004), yet 95.7% of children who work in tobacco growing have worked in at least one activity that is considered as hazardous. Table 12 shows the top five tobacco-growing activities that the child labourers do, and most of these activities are considered hazardous for children. For instance, 15.4% of child labourers in treatment villages and 16.1% in control villages are involved in fertilizing soil, an activity which involves the use of chemical substances. Child labourers are also prone to the nicotine exposure of the green tobacco leaves that they touch in many activities, such as during the harvesting and curing processes in Probolinggo, or the tying process in Lombok Tengah.

Table 12. Top Five Activities the Child Labourers Do in Tobacco Growing

Top 5 Activities between Seedling and Harvesting Phase	Treatment	Control
	Percentage of Child Labour in Probolinggo and Lombok Tengah	
Fertilizing	15.4	16.1
Collecting tobacco leaves	16.2	12.7
Harvesting tobacco leaves	15.4	12.7
Carrying tobacco leaves (from the field to home/warehouse)	17.7	10.2
Weeding the land/killing off insects	10.8	6.8
Top 5 Activities in Post-harvesting Phase in Probolinggo	Percentage of Child Labour in Probolinggo	
Curing tobacco leaves	38.5	33.3
Arranging folded tobacco leaves	38.5	22.2
Carrying tobacco leaves into the storage unit	30.8	33.3
Flipping or adjusting trays when drying tobacco leaves	15.4	33.3
Folding tobacco leaves	15.4	22.2
Top 5 Activities in Post-harvesting Phase in Lombok Tengah	Percentage of Child Labour in Lombok Tengah	
Tying tobacco leaves	79.5	90.8
Removing ties from the tobacco leaves	29.9	32.1
Hanging tobacco leaves	12.8	9.2
Inserting tobacco leaves into the oven	12.0	9.2
Taking out leaves from the oven	12.0	8.3

Source: Calculated from HH survey, SMERU research team, 2019.
Notes: Words in red colour show that the activity is classified as a hazardous activity.

In Probolinggo, three out of the top five are considered unsafe activities for children due to exposure to green tobacco leaves. In both treatment and control villages, around 30% of child labourers are involved in curing tobacco leaves and carrying leaves into the storage unit. Another unsafe activity is arranging folded tobacco leaves, in which 38.5% of children in treatment villages and 22.2% of children in control villages are involved. In Lombok Tengah, four out of five activities are deemed dangerous, which is due to their exposure to green tobacco leaves and extreme temperature from using the oven or working under the sun. Tying tobacco leaves is the main activity that involve many children, it includes 90.8% of child labour in the control villages and 79.5% of child labour in the treatment villages. This is dangerous work because the post-harvesting phase in Lombok Tengah utilizes building-like ovens which requires the leaves to be tied together. Only 10–12% of children from the respective group of villages are involved in the other three unsafe activities. Such activities are hanging tobacco leaves, placing the leaves into the oven, and taking them out of the oven.

We also asked about the working situation of these child labourers, however, we did not measure the intensity of each hazard. In terms of hazardous activities, Figure 20 shows that 70.2% of child labourers who work in tobacco growing reported at least one situation that can be considered as hazardous.

a) Tobacco growing

Hazard	%
Exposed to dust and fumes	47,6
Exposed to extreme temperatures	46,8
Carrying heavy weight	14,9
Working under limited lighting	9,7
Working under minimum ventilation	8,9
Working at height	8,5
Using sharp/dangerous tools	8,1
Exposed to loud noises/strong vibrations	6,9
Working in a dark and enclosed place	6,9
Using chemicals	6,5
Exposed to fire and gas	4,0
Driving vehicles/operating machineries	2,0
Not exposed to any hazards	29,8

b) Other sectors

Hazard	%
Using sharp/dangerous tools	59,3
Exposed to extreme temperatures	46,3
Exposed to dust and fumes	37,0
Carrying heavy weight	13,0
Working at height	13,0
Exposed to loud noises/strong vibrations	13,0
Driving vehicles/operating machineries	1,9
Working under limited lighting	-
Working under minimum ventilation	-
Working in a dark and enclosed place	-
Using chemicals	-
Exposed to fire and gas	-
Not exposed to any hazards	11,1

Figure 20. Hazardous situations faced by child labour (%)

Source: Calculated from HH survey, SMERU research team, 2019.

Note: The percentage is based on 248 child labourers in tobacco growing and 54 child labourers in other sectors.

As many as 47.6% child labourers, reported that they were exposed to a large amount of dust and fumes, including the powdery substance from cured tobacco leaves and the dust from the curing barn as well as the plantation field's dry soil. Also, 44.1% of children reported they are exposed to extreme temperatures. The child labourers reported they felt the heat when working in the plantation field in daylight, or when near the tobacco curing barn. Some child labourers in Probolinggo also reported they felt cold when arranging fine-chopped tobacco leaves on to the tray in the middle of the night. The child labourers in tobacco growing are also exposed to other hazardous situations, for instance, carrying heavyweight while transporting the tobacco leaves (14.9%), working under limited lighting when arranging the fine-chopped tobacco leaves (9.7%), or using chemicals when fertilizing the tobacco plants (6.5%).

On the other hand, the percentage of child labourers who work in other sectors and reported hazardous working situation reached 88.9%. In terms of exposure to dangerous objects, 59.2% of child labourers reported that they use tools such as a knife while working on the rattan-bag or sickle when gathering grass to feed the cattle. In addition, 46.3% of child labourers reported that they were exposed to extreme temperatures, such as the heat when working in the fields or when working on the construction. Also, 37% of child labourers reported they were exposed to dust and fumes, such as when working on the horticulture plantation fields and construction sites.
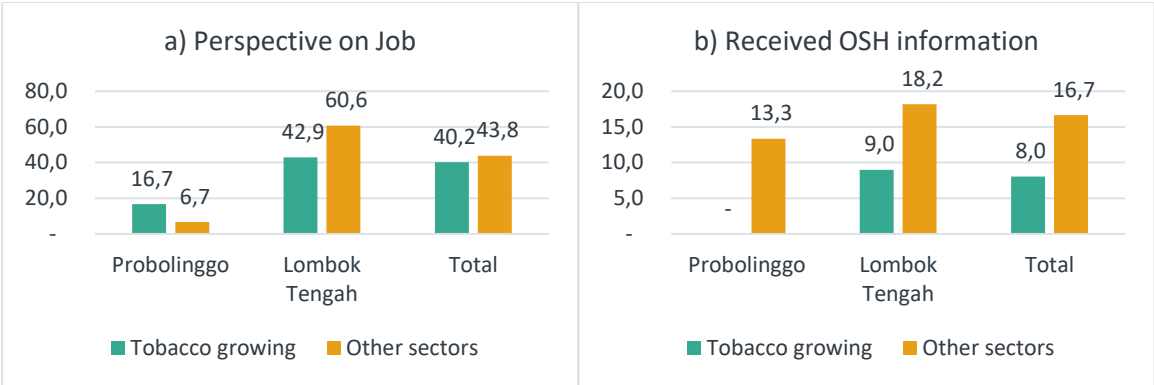
Figure 21. Percentage of child labourers that view their job can cause health problems, injuries, or work accidents

Source: Calculated from HH survey, SMERU research team, 2019.

Note: The percentage is based on child labourers who reported at least one hazardous situation: 174 child labourers in tobacco-growing activity and 48 child labourers in other sectors.

However, not all child labourers who reported the hazardous situation at work have the same perspective regarding whether their work can cause health problems, injuries, or work accidents to themselves. We can see from Figure 21 that the percentage of child labourers who think that their job is hazardous is much lower in both tobacco and other sectors. A lower percentage of child labourers in Probolinggo think that their job is hazardous compared to children in Lombok Tengah. Interestingly, 42.9% of child labourers in the tobacco sector and 60.6% of child labourers in other sectors in Lombok Tengah already perceived that their job can cause health problems, injuries, or work accidents to themselves. The difference between the two study areas might be due to different post-harvest processing methods and each respondent's personal knowledge and experience. Only a few child labourers in both sectors have received occupational health and safety (OSH) information.

Although not all job-related activities need protective equipment, the use of protective equipment is still not common for many child labourers—51.2% of child labourers in tobacco growing and 59.3% of child labourers in other sectors do not use protective equipment at all. Commonly used

protective equipment by child labourers are hats or hijab, gloves, and long sleeves shirt to protect them from sun rays, heat, or pesticides while working in the agriculture field/tobacco plantation/construction site.

a) Tobacco growing

Category	Value
No protective equipment at all	51,2
Head protective equipment	30,2
Hand protective equipment	24,2
Protective attire	20,2
Respitory protective equipment	10,1
Flashlight	2,4
Foot protective equipment	2,0
Ear protective equipment	1,6
Face and eye protective equipment	0,4
Life jacket/float	-
Protective equipment for height work	-

b) Other sectors

Category	Value
No protective equipment at all	59,3
Head protective equipment	35,2
Protective attire	13,0
Hand protective equipment	13,0
Protective equipment for height work	7,4
Foot protective equipment	5,6
Respitory protective equipment	5,6
Flashlight	1,9
Life jacket/float	1,9
Ear protective equipment	-
Face and eye protective equipment	-

Figure 22. Percentage of child labourers who use protective equipment

Source: Calculated from HH survey, SMERU research team, 2019.

Note: The percentage is based on child labourers who reported at least one hazardous situation: 174 child labourers in tobacco growing and 48 child labourers in other sectors.

Within six months prior to the survey, many child labourers reported one or more ailments when working, 82.3% of child labourers in tobacco growing and 75.9% of child labourers in other sectors. The most-reported ailments were extreme fatigue, skin problems (itching, redness, bumps, and spots), cough, and digestive problems. Among child labourers in tobacco growing who reported ailments, 40.4% said that they still go to school while holding the pain and 28.9% said they were absent from school. However, only 17.2% of them saw a health officer and 34% relied on self-medication. As for other sectors, 47.6% of child labourers who had ailments also attended school while holding the pain and only 15.6% saw a health officer.
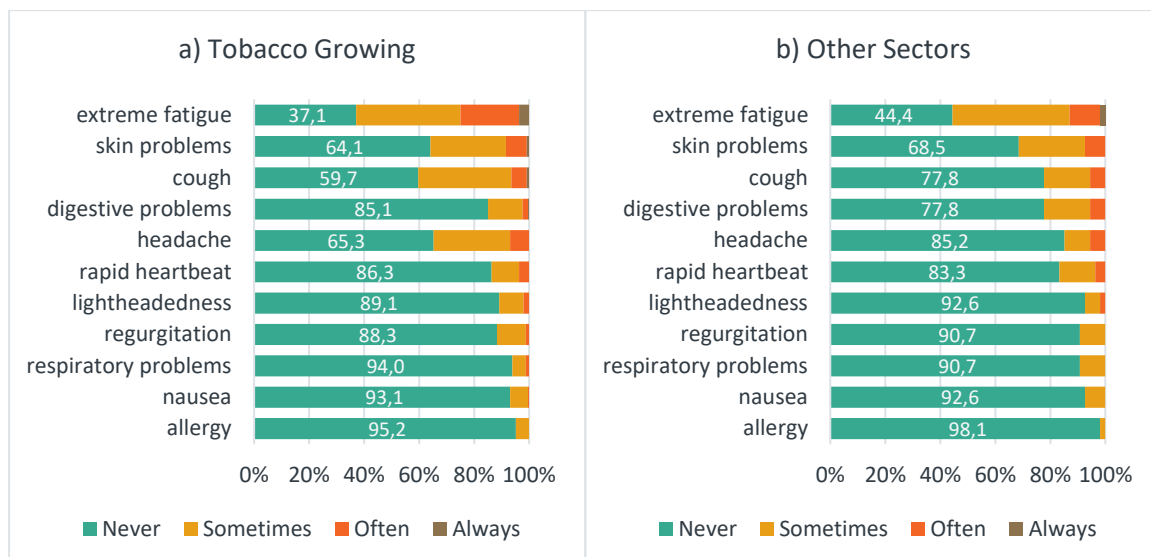
Figure 23. Percentage of child labour who experience ailments when working

Source: Calculated from HH survey, SMERU research team, 2019.

Note: The percentage is based on 248 child labourers in tobacco-related activities and 54 child labourers in other sectors.

5.4 Children in Domestic Work

The ICLS Resolution II classifies domestic work carried out by children as noneconomic activities (ILO, 2007:28). It defines domestic work, or household chores, as a child's engagement in service of domestic nature, done for the benefit of the child's own household and lies outside the production boundary. The activities can include caretaking for family members of the same household, cleaning, minor repairs, washing clothes, ironing, and others. The household survey questions asked about children's involvement in household chores in their own household, the types of domestic work they do, as well as the hours and the number of days they usually spend to do it.

Table 13. Mean and Median of Hours Spent on Domestic Work per Day

Children's Age Group	Probolinggo				Lombok Tengah			
	Hours per day		Hours per week		Hours per day		Hours per week	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
5–12 y.o.	0.6	0.5	2.6	1.0	0.6	0.3	2.9	1.0
13–17 y.o.	0.9	0.6	4.6	3.0	1.1	1.0	4.4	1.7
Overall	0.7	0.5	3.3	1.5	0.8	0.5	3.4	1.0

Source: Calculated from HH survey, SMERU research team, 2019.

Note: We use the mean to show the average hours and median to show the hours to reduce the effect of the outlier answers.

Out of the 628 respondents who are in the age range of 5–17 years old, 169 respondents (26.9%) did not do any form of domestic work at all, while 459 respondents (73.1%) does various forms of domestic work at home. The number of children who does household chores is evenly split among the two *kabupaten*, 220 children in Probolinggo and 239 children in Lombok Tengah. On average, children perform less than an hour of domestic work in both *kabupaten*, with a slightly higher average time spent on household chores for older children than younger ones. Realising that there

are respondents who caused outliers, such as children who spent more than four hours a day to caretake their younger siblings, the median is also presented and it provides a smaller number of hours spent on domestic work per day. Overall, only 46 respondents are doing more than 1 hour of domestic work per day, which is roughly 10% of the respondents who are doing domestic work. In terms of weekly hours on domestic work, the average number of hours is less than five hours in both *kabupaten*. Taking away the influence of outliers from large hours work per week, the median shows a modest 1–1.5 hours per week in both *kabupaten*. Like the hours per day, the older children spent longer hours per week on domestic chores compared with the younger age group. Thus, we can conclude that even though 73.1% of children are involved in domestic work, most of them spend little time on it as doing too much domestic work can disrupt their schoolwork, play, and rest.

Table 14. Types of Domestic Work Performed by Children

Type of Domestic Work	Probolinggo (%)		Lombok Tengah (%)		Overall (%)	
	5–12yo	13–17 yo	5–12 yo	13–17 yo	5–12 yo	13–17 yo
Cooking	18.8	39.1	17.3	36.1	18.0	37.5
Shopping for household	40.4	45.7	40.5	37.0	40.4	41.0
Cleaning utensils/house	42.8	67.4	45.9	49.1	44.4	57.5
Repairing household equipment	1.4	5.4	1.4	6.5	1.4	6.0
Washing clothes	17.3	52.2	32.7	62.0	25.2	57.5
Fetching water	8.2	20.7	23.2	38.0	15.9	30.0
Collecting firewood	3.8	7.6	4.1	4.6	4.0	6.0
Catching fish/wild animals/others for household food	1.4	5.4	1.4	5.6	1.4	5.5
Doing construction or major repair work on own home	-	2.2	-	-	-	1.0
Producing goods for household use	-	-	-	0.9	-	0.5
Caring for small children	8.7	18.5	15.5	11.1	12.1	14.5
Caring for elderly	2.9	9.8	1.4	8.3	2.1	9.0

Source: Calculated from HH survey, SMERU research team, 2019.

The main household chore that children in both *kabupaten* generally do appears to be cleaning household appliances, which 44.4% of children aged 5–12 years and 57.5% of children aged 13–17 years reported to do. For children aged 5–12 years, cleaning is the most selected chore, and this chore can be deemed harmless if performed at an appropriate duration without excessive force and/or at an ergonomic position. In addition, 57.5% of older children perform household cleaning as well, similar to the younger age group, but many of them are also involved in washing clothes, which can be considered more dangerous than cleaning utensils/house. Older children also seem to be involved in other more dangerous chores such as cooking, fishing for consumption, doing construction or major repair work, gathering firewood, and fetching water. For instance, 37.5% of older children (13–17 years old) cook for the household, while only 18% of younger children do it. Caring for the elderly also seems to be more frequently done by the older children than the younger ones, although the younger ones are also as frequent as the older kids to care for small children.

The domestic chores performed might be harmless, but each activity has its hazards and risks that should be noted. Table 15 outlines the potential hazards that each household chore can have on children even if it is performed for their own household. This is based on the ILO Hazardous Child Domestic work briefing sheet publication (ILO, 2007a), as well as ILO's "Children at Work: Health and Safety Risks" (ILO, 2002).

Table 15. ILO's Classification of Hazardous Child Domestic Work

	Type of Domestic Work	Potential Hazard/Danger
1	Cooking	Includes using sharp utensils to cut meat or vegetables, pouring and lighting cooking fuel, the potential for splattered oil or fats when cooking, and working around high-temperature equipment such as a stove or an oven.
2	Cleaning utensils/house	• Scrubbing or washing kitchen utensils may require excessive force and may potentially be done at an awkward position for a long period of time and be physically straining. • Sweeping or mopping the floor may involve extensive time bending over, particularly if the equipment to sweep or mop is not at a suitable height. Furthermore, if children mop using a cloth, they do it on their knees. Both can lead to ergonomic injuries.
3	Washing clothes	• Washing clothes can be harmful due to the heavy loads of clothes that children may need to transfer. • Ironing may be harmful due to the heat that an iron generates.
4	Doing construction or major repair work on own home	Includes fixing any cracks on the roof, repairing lamps and electrical sockets, and cleaning the gutter. These activities may involve heights with uneven surfaces that are dangerous for children, not to mention the hazard of electrocution.
5	Personal assistance and care	Mainly caring for the elderly, which includes aiding them with crutches/a cane, helping them dress/undress, assisting with movement, and potentially assisting to provide medical prescriptions for the elderly. These tasks can lead to a variety of injuries and illnesses for either the children or the elderly.
6	Fetching water	Lifting and carrying heavy water containers through a distance may cause a sprain, fatigue, and physical injuries to children.
7	Collecting firewood	Potential cuts and ergonomic injuries from lifting heavyweights.

5.5 Perspective and Knowledge

In this study, we asked the respondents aged nine years old and above regarding three issues: (i) the minimum age to work and to help with work, (ii) the children's involvement in hazardous activities, and (iii) the positive and negative impacts on children who are working. We use the term "children who are working" with assumption that the respondents are not familiar yet with the term "child labour". In total, there are 1,016 adults and 396 children aged 9–17 years who answered these questions directly. It is important to note that these are the respondents' knowledge and perspective; thus, it should not be understood as the respondents' actual behaviour.

5.5.1 Acceptable Age and Working Hours

First, we asked the respondents regarding the minimum age for children to work and to assist with work. We found that compared with the adult respondents, the child respondents have a tendency to feel that children are capable of working. This is reflected by the children's answers regarding

the acceptable age. According to the child respondents, the average acceptable age to work is 14 years old and to assist with work is 12 years old. Meanwhile, according to the adult respondents, the average acceptable age to work is 16 years old and to assist with work is 14 years old. As seen in Figure 24, 30.8% of child respondents perceive that 5–12 years old is an acceptable age to work, while 20.1% of adult respondents perceive so. In addition, 45.6% of adult respondents perceive that children should not be allowed to work.
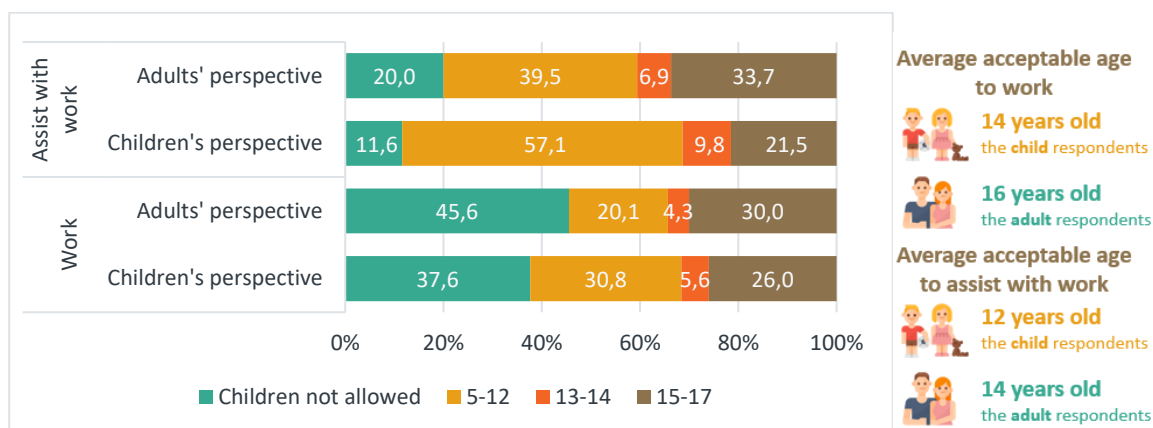
Figure 24. Perspective on the acceptable age to work and to assist with work in general employment

Source: Calculated from HH survey, SMERU research team, 2019.

For employment in the tobacco growing, 37.4% of child respondents and 49.2% of adult respondents perceive that children should not work in tobacco growing. However, when it comes to helping with work in tobacco growing, the respondents are more lenient—only 19.7% of child respondents and 29.2% of adult respondents believe that children should not help in tobacco growing. Figure 25 shows that there is a striking difference in the respondents' perspectives between the study districts. The high percentages of both child and adult respondents who perceive that children are not allowed to work also explain the lower prevalence of child labour in Probolinggo. On the other hand, 36.1% of adult respondents and 45.7% of child respondents in Lombok Tengah view that children aged 5–12 years old are already allowed to work. Such view can be associated with either the respondents' own assistance/employment experience or the experience of the children who are working. In Lombok Tengah, many child labourers are involved in tying tobacco leaves and they perceive this activity as harmless.
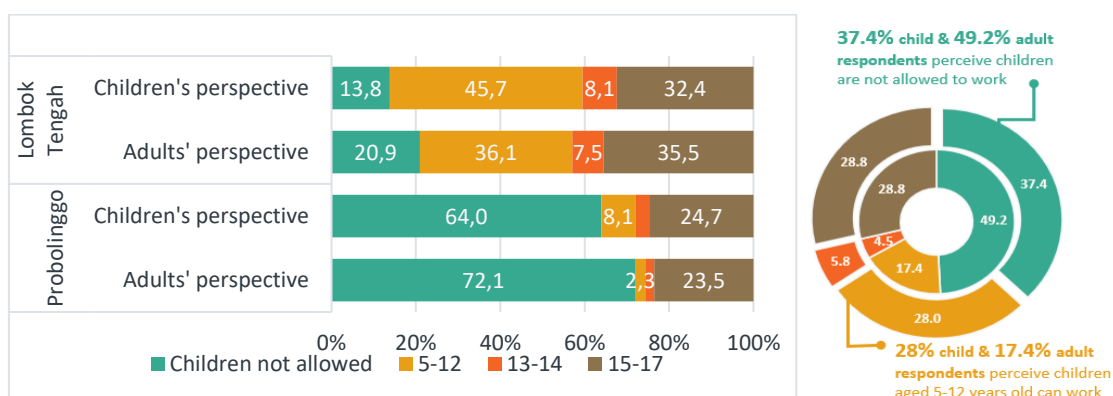
Figure 25. Perspective on the acceptable age to work in tobacco growing

Source: Calculated from HH survey, SMERU research team, 2019.

Note: Outer layer of the donut graph represent the child respondents and the inner layer represent the adult respondents.

We also asked the respondents' view on how much working hours is deemed acceptable for children who are working in tobacco growing. Table 16 shows that the average working hours is roughly between 2–3 hours per day. The child respondents also answered with lower average working hours than the adult respondents, namely 2 hours a day in Probolinggo and 2.7 hours a day in Lombok Tengah. On average, the respondents in Probolinggo view 2 hours a day and respondents in Lombok Tengah view 3 hours a day as the acceptable working hours. There are only slight differences between the respondents in the treatment and control villages.

Table 16. Average Hours per Day Deemed Acceptable for Children to Work in Tobacco Growing

Children/adult	Probolinggo			Lombok Tengah		
	Treatment	Control	Total	Treatment	Control	Total
Children	2.0	1.9	2.0	2.7	2.7	2.7
Adults	2.4	2.5	2.4	3	3.6	3.2
Overall	2.3	2.4	2.3	2.9	3.3	3.1

Source: Calculated from HH survey, SMERU research team, 2019.

5.5.2 Children on Certain Duties in Employment

In the previous subchapter, we know that almost half of the adult respondents perceive that children should not work. In this subchapter, we explore the respondents' perspective and knowledge regarding children's involvement in certain activities that can be deemed dangerous or hazardous. These activities were not mentioned as dangerous when they were asked to the respondents. We will first observe the dangerous or hazardous activities in general, then discuss hazardous activities in tobacco growing specifically.

The majority of child and adult respondents already believe that children should not be engaged in hazardous activities. However, Figure 26 shows that the adult respondents are more permissive, especially in activities that might be common in their everyday lives such as using sharp tools (54.6%) or working in the field under the sun's heat (40.3%). In contrast, many child respondents do not feel that they should be involved in those hazardous activities.

The SMERU Research Institute
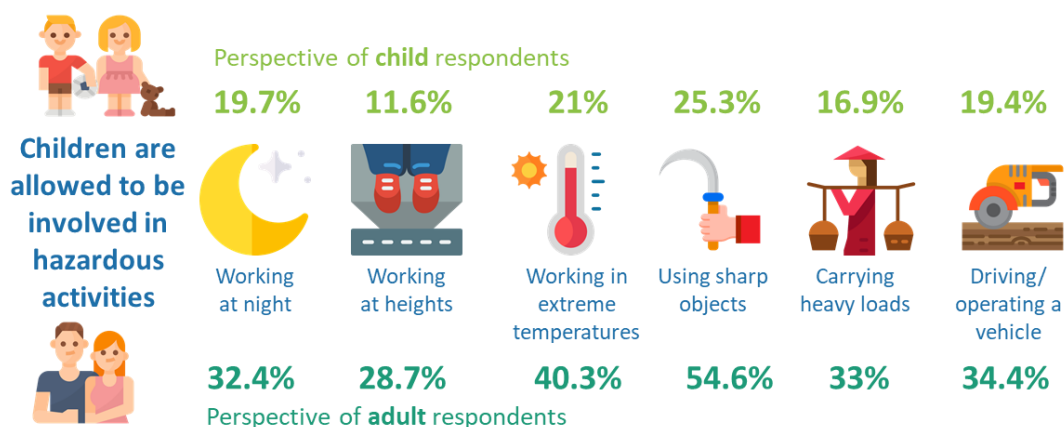
Figure 26. Respondents' perspective regarding children's involvement in hazardous activities in general

Source: Calculated from HH survey, SMERU research team, 2019.

Note: The percentages are based on 1,016 adult respondents and 396 child respondents.

We also explore the farmers' and farm workers' perspectives regarding activities that can be hazardous for children. First, Figure 27 below shows there are only slight percentage differences between the farmers and farm workers in the treatment and control villages who perceive that children are allowed to do the hazardous activities. Second, we would assign one point for each question if the respondents answered, "children are not allowed". Surprisingly, 75% of farmers and farm workers in Probolinggo already have four to six correct answers, yet this is the case for only 36.5% of farmers and farm workers in Lombok Tengah. More importantly, there are 21% farmers and farm workers in Lombok Tengah who view that children are allowed to do all six activities and 42.5% only have one to three correct answers.
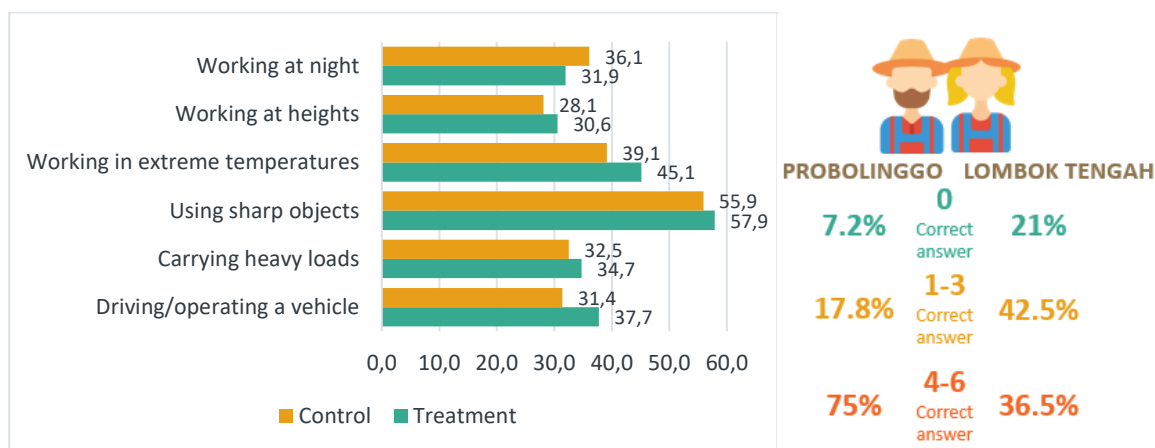
Figure 27. Farmers and farm workers' perspectives regarding children's involvement in hazardous activities in general

Source: Calculated from HH survey, SMERU research team, 2019.

Children's involvement in processing the tobacco leaves is also deemed acceptable by more than half of the child and adult respondents. The large percentage of difference in perspective only appears in the provision of crop protection agents (CPAs) and plant medicine, which might be due to the adults' perspective that older children (aged 15–17 years) can do it. This could be associated with the children's own experience or the experience of their parents or other adults who started

working at a young age in tobacco growing. This aligns with the finding that the average age of adult respondents had their first job at the age of 15–16 years old. In addition, the children in Lombok Tengah have been tying tobacco leaves as part of curing the tobacco leaves since a young age, and they generally believe that it is a harmless activity, as seen in Figure 28. Thus, this may be one of the reasons why children in Lombok Tengah think that it is acceptable for them to be engaged in activities that can be hazardous for them.
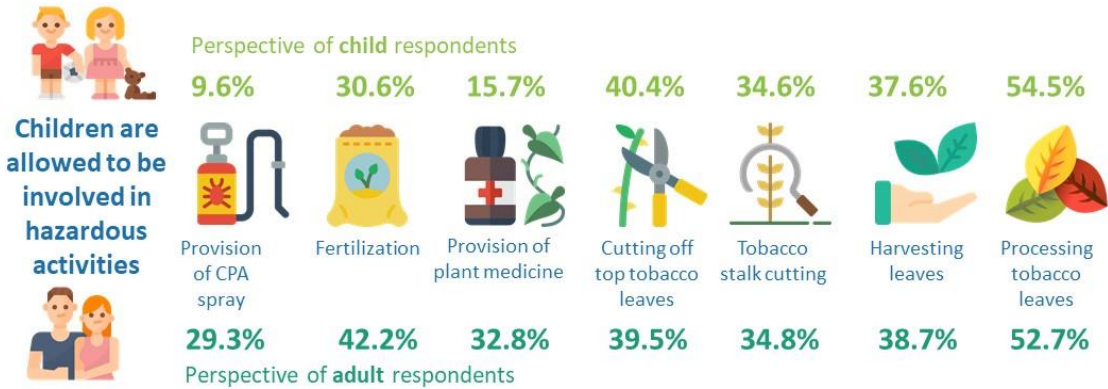
Figure 28. Respondents' perspective regarding children's involvement in hazardous activities specific to tobacco growing

Source: Calculated from HH survey, SMERU research team, 2019.

More than half of the farmers and farm workers also perceive that children are allowed to be involved in processing the tobacco leaves (Figure 29), such as in curing or tying them. More than 40% respondents also perceive that children can fertilize the tobacco plants and cut the top leaves of tobacco plants. There are no significant percentage differences between the respondents in the treatment and control villages. Using a similar method as in Figure 27, we also found that 79.6% of respondents in Probolinggo already have four to seven correct answers, yet only 24.3% of respondents in Lombok Tengah have the same result.
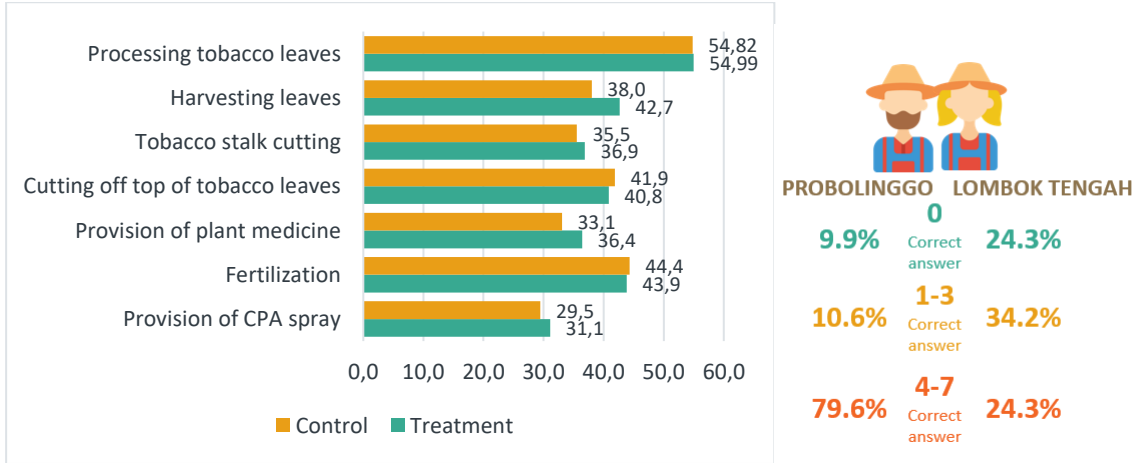
Figure 29. Farmers and farm workers' perspective regarding children's involvement in hazardous activities specific to tobacco growing

5.5.3 Impacts of Working on Children

The survey also sought the opinion of the respondents on what they believe to be the positive and negative impacts of working on children. Questions were not closed-ended and they were asked to mention the positive and negative impacts that they could think of. The positive impacts include the ability to earn money, obtain knowledge and experience, or to fill in free time, while the negative impacts include impacts on the children's continuity in education, health, and social life.

Roughly 10% of adult and child respondents respectively do not believe that there is a positive impact. However, most children and adults (almost 50% in each group) agree that the positive impact is for children to earn money for a living. The second most mentioned answer is to obtain additional pocket money, which children tend to spend on snacks or entertainment, rather than for daily needs. Besides money, adults are also concerned about the experience and independence aspects of working. However, "practising self-discipline" and "making their parents proud" do not seem to be effects that the respondents commonly associate with children working (Figure 30).
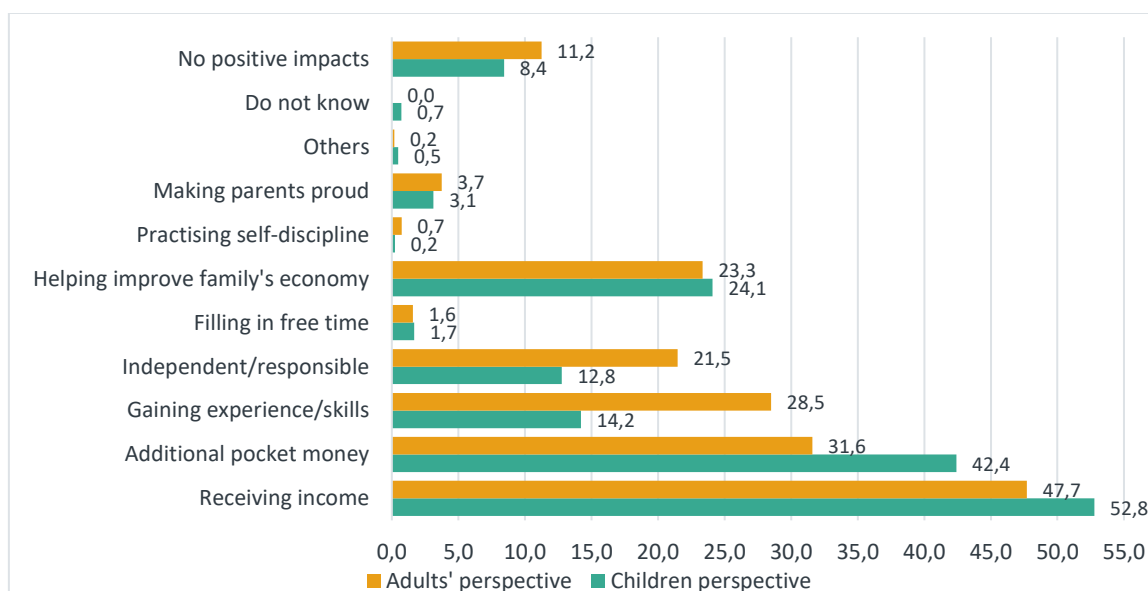
Figure 30. Perspective on the positive impacts on children who are working
Source: Calculated from HH survey, SMERU research team, 2019.

Declining health among working children seems to be the main concern for respondents of all age groups. The figure is particularly high for children (reaching almost 45%) and adults (38%). The adult respondents in general, consider working to bring bad impacts on children's motivation (22.5%) and ability to study (26.5%). However, only a few mentioned about the impacts on grades (7.4%) or children's willingness to continue school (2.4%). Lastly, 22% of children, as well as roughly 22% of adults, believe that there are no negative impacts from working at young age (Figure 31).
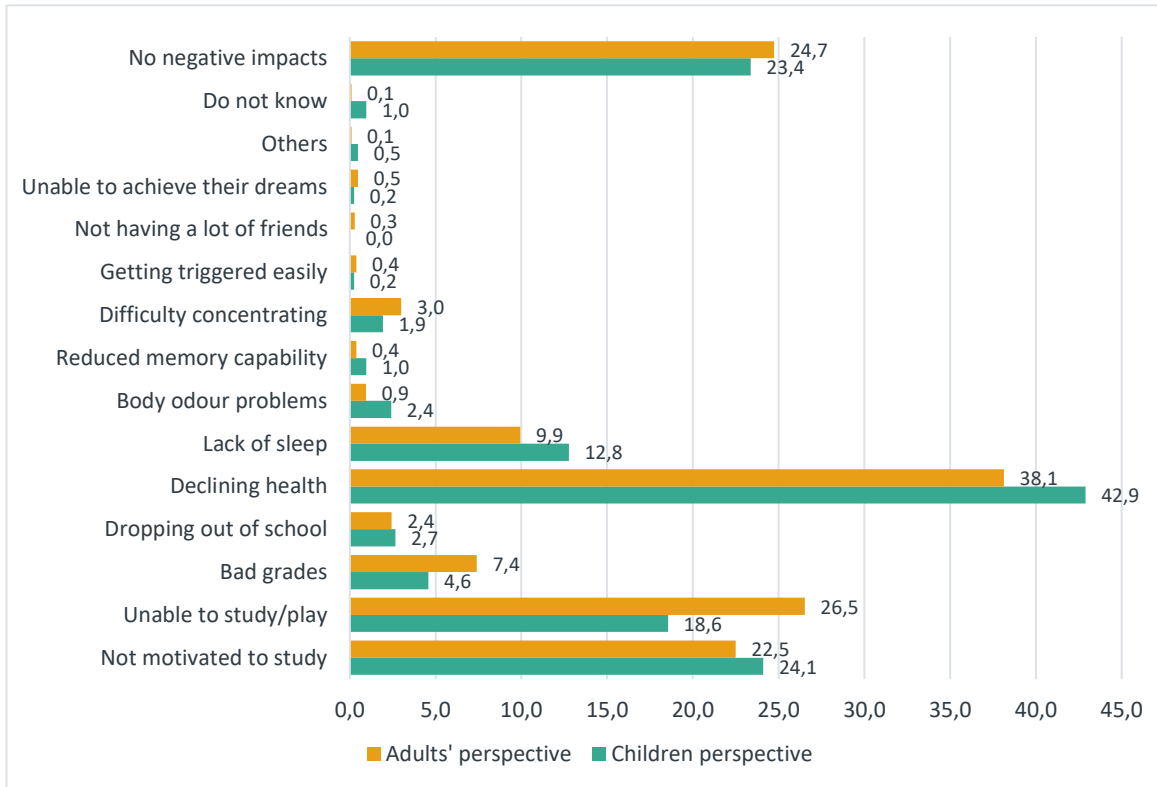
Figure 31. Perspective on the negative impacts of children who are working
Source: Calculated from HH survey, SMERU research team, 2019.

VI. EVALUATION DESIGN

Through the KESEMPATAN programme, a partnership of government, corporate, and civil society entities is formed to reduce the prevalence of child labour in agriculture. This baseline study's purpose is to provide information on the initial conditions and profiles of children and households prior to the KESEMPATAN intervention programme and use the baseline data to evaluate the programme's predicted impacts. In this section, we start by discussing the baseline findings and proceed with the proposed research design for the 2023 evaluation phase.

6.1 Discussion

During this study, all study villages were currently not receiving any intervention programme regarding child labour and all households had at least one member working in tobacco growing in 2019. Also, many of the child labourers had never received any information regarding occupational safety and health. Thus, these aspects lead to a suitable precondition of the intervention programme which aims to reduce the prevalence of child labour in agriculture. Based on this baseline study, we have identified key findings that are important for the intervention programme's design as well as for the evaluation plan. We present the findings in three categories: perspectives on working children and hazardous activities, children's involvement in tobacco growing, and the programme's implementation design.

6.1.1 Perspective on Working Children and Hazardous Activities

The lack of information regarding the child labour issue can be seen in the high percentages of children and adults that believe it is acceptable for children to work even before the children turn 15 years old (the minimum age of employment). Compared with the adult respondents, the child respondents have the tendency to feel that children are capable to work. This is reflected by the children's answers regarding the minimum age of work. The average minimum age of work is 14 years old according to the children (adults: 16 years old), and the percentage of children who answered "children are not allowed to work" is only 37.6% (adults: 45.6%). In line with this, there are only a few children and adults who believe that there is no positive impact for children who are working.

Regarding hazardous activities in general, it is a good sign that the majority of children and adults perspective already believe that children should not be engaged in hazardous activities. However, the adults are more permissive regarding the hazardous activities, especially in activities that might be common in their everyday lives such as using sharp tools or working in the fields under the sun's heat. Meanwhile, most of the children do not feel that they should be involved in those hazardous activities. This raises concerns as children tend to follow the adults' order, while the adults might not know that the said activities are hazardous for children. The high involvement of children in tobacco growing, especially during the tobacco post-harvesting phase, is a consequence of the household members' lack of information concerning health effects on children working in tobacco growing.

Another concern is the children and adults' perspectives regarding children's involvement in tobacco growing. Children's involvement in processing the tobacco leaves is deemed acceptable by more than half of the children and adults. The perspective gap between the children and adults only appears in the provision of CPA spray and pesticides, which might be due to the adults' view that older children (aged 15–17 years) are capable of spraying pesticides. Although both children

and adults knew that children working may experience health decline and that working might also interrupt their school, more than 20% of them believe that there is no negative impact for children who are working.

6.1.2 Children's Involvement in Different Tobacco Growing Areas

We found that the tobacco growing characteristics of each area also became an important factor in children's involvement. The characteristics include the type of tobacco and its post-harvesting method, the employees—family or outsider, and the children's motivation to work.

Tobacco growing in Lombok Tengah is characterized by large plantation areas of flue-cured tobacco and use of curing barns (ovens). The child labourers are mostly involved in tying the green tobacco leaves before the curing process and in removing the ties from the cured tobacco leaves; the former is considered as a hazardous activity due to the contact with green tobacco leaves (Hermanus et al., 2019). These child labourers mostly work for non-family employers and the job is concentrated near the curing barn. For these child labourers, earning income is their main motivation for working in tobacco growing. On average, these child labourers earn Rp270,000 a month (USD 19.29). The average income among older children (aged 15–17 years) is more than Rp500,000 a month (USD 35.71). After the tobacco-growing season is over, the prevalence of child labour drops from 7.04% (TR: 6 months) to only 9.8% (TR: 1 week). Some child labourers are then involved in producing handicraft goods or working in construction, yet these jobs are also considered hazardous for children.

On the other hand, tobacco growing in Probolinggo is characterized by small plantation areas of sun-cured tobacco. Child labourers are mostly involved in folding the green tobacco leaves before they get chopped, and in the drying process. As most of the farmers own their own land or rent it in a profit-sharing scheme, it is common for the farmers to bring the harvested tobacco leaves home and process them in their own house. However, the production capacity is not as high as the ones in Lombok Tengah and the farmers mostly rely on their own household members or extended family for help. The motivation of child labourers in Probolinggo is also mainly their self-willingness to help their parents or extended family. The prevalence of child labour during the tobacco-growing season is not quite different from the off-season—10.7% (TR: 6 Months) during the tobacco season and 5% (TR: 1 Week) during the off-season. Outside tobacco growing, the child labourers also help in other agricultural work, such as collecting grass for cattle or helping the growth of other crops.

6.1.3 The Programme's Implementation Design

The implementation of the KESEMPATAN programme in the targeted villages is set to focus on three aspects: increasing the farmers' and farm labourers' knowledge of child labour issues; establishing child-friendly villages and preventing children from becoming child labourers. However, when we visited the first-year treatment villages, most of the village officials and local cadres, who will be involved in the programme, did not have a clear understanding of the programme. They also lack knowledge of child labour issues.

Given the perspectives on working children and hazardous activities, it is particularly important to address this issue seriously because it is not easy to change people's point of view. The design of KESEMPATAN programme already put this issue into consideration as seen in its planned activities. However, most of the activities planned to target only farmers and farm workers, whereas, it is also important to educate the parents. Several studies show parents play a critical role in determining whether children work (Bessell, 2009; Dumas, 2007; Haszelinna binti Abang Ali and Arabsheibani, 2016; Togunde and Weber, 2007). According to our baseline result, 79.2% of child labourers in Lombok Tengah and 31.8% of child labourers in Probolinggo are non-family labourers, which means

that they do not work for their parents. As a high percentage of adults think that it is normal for children to work, parents' awareness of the child labour issue should also be developed. Ironically, the village-specific programme for children's activities is designed by adults and without the children's involvement in the process. The children may feel that the programme does not meet their interest. Consequently, children may not be interested in participating in the activities.

Another thing to note is that children are used to working and they also have benefited from work, especially from the income they earn. Our result shows that children perceive working at their age is acceptable though they must deal with hazardous activities. Since they also believe that working has a positive impact on them, it will be a challenge for the programme to stop children from working. The programme should put priority on preventing children from getting involved in hazardous activities. In addition to that, the programme needs to also involve the parents and the children to discuss the activities that they want to do in the community activity centre.

6.2   Key Output and Outcome Measures

Based on the programme's ToC, we propose six key outputs and four outcomes that will be evaluated in 2023. We will compare the baseline and end-line data, as well as compare between the treatment and the control villages. The six key outputs are as follows.

a) PAACLA members initiate prevention of child labour in the agricultural sector.
   This output will be measured using a qualitative approach by interviewing several informants from the government, the private sector, and NGOs. We will identify PAACLA members' initiatives in relation to the KESEMPATAN programme. In relation to this output, it is also desired that PAACLA members have the capability to design and implement the monitoring and evaluation programme on child labour.

b) Local cadres gain knowledge and skills to be trainers on the child labour issue.
   The qualitative team will inquire information on the detailed activities conducted in villages by local cadres as well as on the training they obtained from the KESEMPATAN programme. We will use a set of story-based questions that will be developed for the evaluation phase.

c) Farmers and farm workers can distinguish forms of child labour.
   We will use the existing questions in the Knowledge and Perspective Regarding Child Labour Module to capture respondents' comprehension of the legally minimum age for children to work, which is 15 years and the minimum age for doing hazardous work, which is 18 years. However, we need to create a set of story-based questions to assess whether the respondents can distinguish between working children and child labour, and whether they can identify the types of work hazards. The qualitative method will also cover this output by inquiring farmers and farm workers' perspectives on child labour.

d) Stakeholders have a clearer understanding of national commitments on the regeneration of tobacco production and the elimination of child labour.
   This will be covered by using qualitative method by inquiring stakeholders' perspective on child labour as well as their action in supporting the KESEMPATAN programme.

e) Child labourers reduce their involvement in the agriculture sector.
   We will use the existing questions in the General Occupation Module and the Occupation in Tobacco Growing Module to measure the prevalence of child labour in agriculture, in tobacco growing, and in sectors other than agriculture. We will use the household survey to measure

the changes in child labour's prevalence. We will also conduct in-depth interviews and/or focus group discussions (FGDs) to analyse the changes.

f) Villages enact child protection policies, including policies on the elimination of child labour.
    Two main things that we will identify in the study villages to measure output are the existence of a village regulation on child issues and the process of developing a child-friendly village. Regarding the village regulation, we will identify the legal documents of the child-friendly village taskforce and the children's forum. We would also like to observe whether the the community centre and facilities, the taskforce centre, and the children forum are still running. We use the questions in the Knowledge and Perspective Regarding Child Labour Module to know the respondents' source of information regarding the child labour issues.

In addition, we will analyse how KESEMPATAN programme achieves these four-key outcomes.

a) Strengthening the PAACLA institution as a partnership to eliminate child labour in the agricultural sector.
    In evaluating this outcome, it is needed to identify PAACLA activities during the KESEMPATAN programme and whether the output is in accordance with the KESEMPATAN programme's planning document.

b) Increasing the understanding and awareness of farmers and farm workers on the issue of child labour.
    Based on the output number 3, we will analyse the changes in the perspectives of farmers and farm workers on the child labour issue. We will also identify the actions taken in response to the changes.

c) Increasing the stakeholders' knowledge on the issue of child labour in the agricultural sector.
    As with the second outcome, we will develop a set of instruments to assess the knowledge of stakeholders, government and private sector (tobacco companies) on child labour issues. We will also check whether stakeholders are aware of issues related to regulations or policies on child labour.

d) Establishing a child-friendly village model.
    The KESEMPATAN programme is eager to establish a child-friendly village model which is expected to reduce children's participation in working in the agricultural sector. This outcome can be measured by probing the extent of replicability of the child-friendly village. The team will obtain information on the willingness of the neighbouring villages of the sample villages in replicating the model.

6.3   Analysis Design for Evaluation

We aim to be able to conduct the data collection at the peak of the tobacco harvest season in 2023, so we will be able to obtain comprehensive findings regarding the children's involvement. The qualitative and the quantitative team will conduct data collection in the same time frame, so we can triangulate the information right on the spot. Our analysis design for evaluation is by using a difference-in-difference estimation method using the household survey data. Meanwhile, the qualitative team will be guided by the Outcome Evaluation Approach.

6.3.1 Quantitative Method

To quantitatively obtain an appropriate estimate of the causal effect of a programme/ intervention, the study will use the difference-in-differences estimation method (DID). DID is a quasi-experimental design that makes use of longitudinal data from treatment and control villages in order to obtain an appropriate counterfactual result to estimate a causal effect from a treatment by calculating the changes in outcomes over time between a population intervened by a programme (treatment villages) and a population that does not experience intervention (control villages) (Gertler et al., 2011).

DID will be used in this study since we will have a set of data over time from the intervention and control villages, but more importantly, treatment villages are not required to be selected randomly with DID. Simply observing the before-and-after changes in the outcomes for treatment villages will not provide an actual picture of the causal effect as many other unobserved factors are unaccounted for, which causes an omitted variable bias. At the same time, comparing villages that received an intervention with the villages without intervention will be an issue due to the selection bias as to why some villages were chosen compared to others.

DID combines both measures and compares the changes in outcomes for villages intervened by the program with the before-and-after changes in villages not intervened by the program. In other words, DID focuses on comparing the changes happening to the intervened villages and control villages. The changes for the intervened group help to control factors that are constant over time in a village (constant factors), while the before-and-after condition for the control villages acts as a way to control factors that are time-varying (time-varying factors). Thus, the changes in the intervened villages are measured by subtracting the time-varying factors from the constant factors. For the DID to be valid, there are rules and assumptions ,which are:

a) Treatment and control villages do not necessarily need to have the same preintervention conditions although they need to have a similar environment (e.g. economic condition, etc.).

b) The control villages must be similar in nature to the treatment villages.

c) Equal trends assumption: In the absence of an intervention, the treatment villages are changing similarly to the control villages. In other words, should there be no intervention taking place, the difference between the two groups is constant over time.
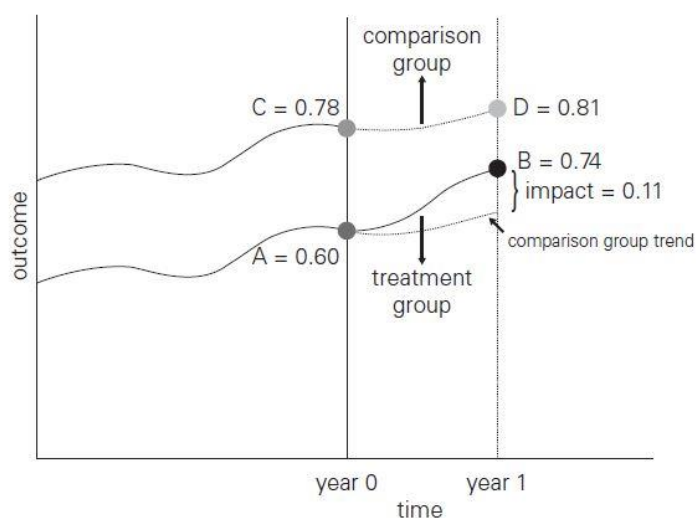
Figure 32. Difference-in-differences illustration
Source: Gertler et al. (2011).

The equal trends assumption is a crucial one for DID because knowing that an absence of treatment implies that control and treatment villages are changing at a constant similar rate, thus the difference in slope between changes in the intervened group and the control villages will define the treatment effect of programme implementation. Visually, we can see an illustration of DID in Figure 31. Based on Figure 32, points A and B are the before-and-after conditions of the intervened villages, while C and D are the before-and-after conditions of control villages. Thus, B-A subtracted from D-C (who acts as the counterfactual) should provide us with a treatment effect ("impact" shown in Figure 32).

$$Y_i = \beta_0 + \beta_1 * Time_i + \beta_2 * Treatment_i + \beta_3 * (Time * Treatment)_i + u_i$$

The regression model describes what Figure 31 has visually represented. The Betas represent parameters. B1 describes the slope in the counterfactual shown in the figure as D-C. B2 describes the constant difference that is constant over time between intervened villages and control villages in the absence of treatment, shown as the difference between C-A. While B3 is an impact measure that shows the time-varying factors that affect the intervened villages.

Limitation to this estimation method is in the equal trends assumption that assumes that the difference between the treatment and control is constant over time, which is assuming that there will not be any significant difference that can change the slope that makes the two parallel. However, despite the limitation, this method is still widely used when randomization is not possible to select the treated, and it is possible to gain longitudinal data on defined treatment and control villages. Using this method and the data, which will be gathered during the endline phase after the program ends, we hope to be able to identify the causal effect that a program can have to the treatment villages.

6.3.2 Qualitative Method

The qualitative method aims at providing an explanation of how and why the programme achieves or does not achieve the desired outcome. In addition, the qualitative study will also aim at capturing the extent in which each desired outcome was able to be attributable to the KESEMPATAN programme. The qualitative method will utilize the ToC that was developed in the baseline study as its main analytical framework. Qualitative data will be collected to evaluate the actual outcomes and to explain any identifiable discrepancies with the ToC developed. Henceforth, data collection at the endline phase will be conducted in accordance with each ToC component. The data collection will be guided by the outcome evaluation (OE) approach. The OE approach was selected because the KESEMPATAN programme has an actor-specific desired outcome. Unlike other qualitative evaluation approaches, the OE approach does not aggregate the expected results due to the fact that it acknowledges the existence of other actors and processes within the programme's sphere (Belcher et al., 2020), thus allowing the study to assess in a more precise manner among different layers of actors and processes.

At the national level, in-depth interviews will be conducted among PAACLA members from the government, the private sector, to NGOs. These interviews aim at assessing knowledge acquired as part of the membership benefits and initiatives implemented due to the newly acquired knowledge. At the *kabupaten* level, interviews will be conducted with the programme implementers and stakeholders. Using the snowballing method in choosing the stakeholders, we will ask the programme implementers and PAACLA members at the national level to suggest the stakeholders who have invested interest in the issue of child labour in agriculture. Similar to the objective at the national level, data collection at the *kabupaten* level aims at assessing knowledge and initiatives.

Interviews with the selected stakeholders aim to assess the effectiveness and efficiency of PAACLA members in enhancing the chosen stakeholders' knowledge on the national commitment regarding child labour issues. Additionally, the interviews with the programme implementers aims at exploring the differences between the desired and actual outcomes as well as the barriers they encounter during the implementation of the programme.

At the village level, data collection will be carried out in a more varied manner. Several interviews and FGDs will be conducted with village officials, KESEMPATAN cadres, child forum cadres, learning centre tutors, household beneficiaries, farmers, farm workers, children, teachers, and health officials. The main objective of the data collection is to capture the contextual information on programme implementation and the perceived effectiveness of the programme in achieving the desired outcome. Some observations may also be done to examine whether the activities are still sustained, and the facilities built (e.g. learning/community centre) are still used by children.

6.4   Research Questions for Evaluation

Given the findings, outputs, and outcomes, research questions for the evaluation phase are as follows:

   a) What is the difference between child labour prevalence in the treatment and control villages in the tobacco-growing areas as a result of the KESEMPATAN programme?

   b) How is the understanding and awareness of the stakeholders regarding child labour issues after the KESEMPATAN programme is implemented?

   c) To what extent does the KESEMPATAN programme is attributable to changes in children's participation in the agricultural sector in the tobacco-growing areas?

VII. CONCLUSION AND RECOMMENDATIONS

This section provides the conclusion of the baseline study's findings and recommendations for the programme implementers of the KESEMPATAN programme.

7.1 Conclusion

The baseline study provides initial conditions and profiles of children and households prior to the KESEMPATAN intervention program, which is to eliminate child labour in agriculture. The KESEMPATAN programme's design resulted in four main activities, which are (i) strengthening the PAACLA institution; (ii) increasing the understanding, awareness, and knowledge of farmers and farm workers as well as stakeholders on the issue of child labour; (iii) enhancing national stakeholders' knowledge on the child labour issue; (iv) and establishing child-friendly villages. From the four activities, it is expected that the programme will reduce the prevalence of child labour in agriculture. This baseline study investigates villages in two *kabupaten* considered as tobacco-growing areas, namely Kabupaten Probolinggo in East Java Province and Kabupaten Lombok Tengah in West Nusa Tenggara Province.

The study finds that most of the working children in tobacco households were only working during the tobacco season and the majority during the post-harvesting stage. However, these children were exposed to hazardous conditions. The child labour prevalence from our sample reaches 39.5% for the tobacco-growing sector, and many of them face dangerous or hazardous working situations. Different production capacities and different initial perspective of children's involvement between the two *kabupaten* are the main reasons behind why Lombok Tengah has a higher child prevalence than Probolinggo. For instance, curing leaves is an essential process in tobacco production in Lombok Tengah and the farmers perceive the process to be non-dangerous. However, involvement in tobacco-growing activities cannot be considered safe for children. The majority of children who work in tobacco-growing activities have been exposed to at least one activity considered hazardous, mainly to a large amount of dust and fumes that originate from the powdery substance while curing tobacco leaves, or the dust from curing barn and the plantation field's dry soil. Other hazardous situations that some children were exposed to include heat, limited lighting, or chemicals when they had to fertilize tobacco plants. The children's involvement in employment can often be associated with monetary reasoning—69% of child labourers in Lombok Tengah said that they work because they want to earn income, while 63.6% of children in Probolinggo do it out of self-willingness to help their family. On average, children involved in tobacco growing are working for 3 hours a day, 4 days a week, with an average monthly income of Rp267,000 (USD 19.07) paid based on the completion of work each day.

This study also sought to understand the perspective of the village communities (both in the treatment and control villages) on child labour. There is a general tendency to be more lenient to younger children when it comes to them helping with work. Although both adults and children indicated that older children (aged 13–17 years) are allowed to work. When it comes to tobacco-growing employment, almost 50% of adults believe that children should not be working there, while only 35% of children believe so. Despite their answers about minimum age, adults are more permissive than children towards allowing dangerous activities to be performed by children, such as using sharp tools or working under the sun. Although both children and adults know that children who are working might have declining health and that working might also interrupt their school, more than 20% of them believe that there is no negative impact for children who are working. The

answers from the survey can be compared should the study attempt to analyse the respondents' perspectives after the program has been implemented.

7.2 Recommendations

As each *kabupaten* is unique, the programme implementers should not give equal proportions of intervention and resources among the intervention *kabupaten*. Based on the baseline study findings, we have three recommendations.

7.2.1 Selection of Locations and Beneficiaries of the Programme

When selecting the locations for the intervention programme, the programme implementers should take into consideration their partner tobacco companies' interest. They might have more concern over the child labour issue in their own working regions, which are at the village level. As the partnership grows, more companies might be interested to adopt the programme in their working regions. With this step, there are three advantages to the programme implementation, which are as follows.

a) The programme implementers can assure that all the prospective villages are prominent tobacco producers. The prominent tobacco producers' higher production output might well correspond to higher demand for farm workers, including children.

b) The programme implementers can access initial information regarding previous intervention (if any) regarding the child labour issue and the community's perspective on children's involvement in tobacco-growing activities. The implementers might select villages that never received any intervention beforehand and make an agreement with the companies so that the companies will not intervene with the intervention programme.

c) As the contracted farmers had received child labour elucidation from the companies, the programme implementers can focus on delivering the programme for non-contracted farmers, farm workers, and their families.

The programme implementers also have the potential to gain village governments' trust and support since the governments assume that the programme implementers are partners of the tobacco companies. However, the programme implementers must find the way to ignite the village governments' awareness towards child labour issue and encourage the village governments to allocate resources and funding to make the intervention programme sustainable for the upcoming years.

The next recommendation is for the programme beneficiary selection. The village officials and local cadres should already have clear and complete information regarding the programme when they work with program implementers in selecting the beneficiaries. Lack of information might lead to mistargeting when listing the potential programme beneficiaries. The mistargeting might even get worse when the beneficiaries associate the programme with monetary assistance. The programme implementers should be aware of this problem since the social mapping phase. Then they should also adjust as needed and check on the beneficiaries' background information data to be able to identify the mistargeting problem.

7.2.2 Intervention Programme Design

Effectiveness of the programme will also be largely dependent upon the quality of deliverance by local cadres. Therefore, it is important to ensure that the selected cadres tasked with disseminating information and running each village's community activity centre are well-trained and equip to

perform their tasks. A considerable amount of literature has shown that facilitators' skills are correlated with a variety of programme's dimensions, including programme attendance and output (Dillman Carpentier, F. Mauricio et al., 2007, Giles et al., 2008). Aside from the possession of adequate skills, it is also important to select cadres with strong relationships with the chosen beneficiaries. A sizeable amount of literature has noted that relationship quality between the participant and the facilitator is associated with active participation, attendance, and homework completion (Shelef et al., 2005).

As the intervention programme's activity will mostly be delivered from the community activity centre, we recommend taking these aspects into consideration.

a) Activities or facilities that attract children of any age. To find what is interesting for these children, the programme implementers should ask and discuss with the children, not with the adults.

b) Additional value for the adults. The adults might think that the community activity centre is limited only to children. To attract the adults, the programme implementers might need to work together with other institutions or resource persons. The program implementers can, for example, work together with the village midwives or doctors to provide monthly health check-up and to disseminate the occupational health and safety information. Discussions with the adults are also needed to know their concerns and interest.

c) Timing and benefits of the community activity centre. When designing the programme schedule, the programme implementers should come up with more attractive activities (and if possible, rewards) during the post-harvesting phase of the tobacco season. The activities can be in the form of, for example, a dance competition or a sports competition with monetary or in-kind rewards that are useful for the children, such as bicycles, shoes, and bags.

7.2.3   Collaborative Action

In the implementation of a programme, it is vital that all members of society play a supportive role, hence creating an enabling environment to support the effectiveness and efficiency of the programme. To facilitate the implementation of the programme, village governments could provide the programme with a supporting legal framework such as through the enactment of a child-friendly village regulation. The village governments could also provide a strategic location for KESEMPATAN programme's community centre in each village. They could also dedicate a place for tobacco-leaf processing that meets the occupational health and safety criteria. Community representatives should be involved in the elucidation process, such as through sermons in the Al Quran recital events. Program implementers should also work together with schools to ensure the children will not be absent from class during the post-harvesting phase. They should also provide extracurricular activities and equip children with adequate knowledge regarding child labour issues and occupational health and safety information.

Given that a number of tobacco companies have been actively making efforts to reduce child labour, the programme implementers or village officials could also consider the option of collaborating with private companies particularly in terms of provision of facilities and financial support when needed to sustain the implementation of the programme. Public-private partnerships (PPPs) have been adopted in a number of programmes in the education and health sectors, resulting in positive outcomes such as increased added value to the programmes' knowledge, operation, visibility, and networking capacity (ILO, 2014; Radsky, Nabiyeva, & Mikayilova, n.d.). Understanding the complexities and fallout which might arise (e.g. source of funding, duration, and recognition), both parties should come to a binding agreement prior to commencement of the programme.

LIST OF REFERENCES

Amigó, M.F. (2010) Small bodies, large contribution: 'Children's Work in the Tobacco Plantations of Lombok, Indonesia.' *Asia Pacific Journal of Anthropology* 11 (1): 34–51.

Belcher, B.M., R. Davel, and R. Claus (2020) 'A Refined Method for Theory-based Evaluation of the Societal Impacts of Research.' *MethodsX*. Elsevier B.V. 7: 1–20 [online] https://doi.org/ 10.1016/j.mex.2020.100788.

Bessell, S. (2009) 'Indonesian Children's Views and Experiences of Work and Poverty.' *Social Policy and Society* 8 (4) 527–540.

Dillman, Carpentier F.R., A.M. Mauricio, N.A. Gonzales, R.E. Millsap, C.M. Meza, and L.E. Dumka (2007) 'Engaging Mexican Origin Families in a School-based Preventive Intervention.' *Journal of Primary Prevention* 28: 521–546.

Dumas, C. (2007) 'Why Do Parents Make Their Children Work? A Test of the Poverty Hypothesis in Rural Areas of Burkina Faso.' *Oxford Economic Papers* 59 (2): 301–329.

Gertler, P.J., S. Martinez, P. Premand, L.B. Rawlings, and C.M.J. Vermeersch (2011) *Impact Evaluation in Practice.* Second Edition.

Giles, S., J. Jackson-Newsom, M. Pankratz, W. Hansen, C. Ringwalt, and L. Dusenbury (2008) 'Measuring Quality of Delivery in a Substance Use Prevention Program.' *Journal of Primary Prevention* 9: 489–501.

Haszelinna binti Abang Ali D. and G.R. Arabsheibani (2016) 'Child Labour in Indonesia: Supply-Side Determinants.' *Economics and Finance in Indonesia* 62 (3): 162–179.

Hedlund, N. (2013) 'Coding: An Overview and Guide to Qualitative Data Analysis for Integral Researchers.' *Integral Research Center Resource Paper* 1 [online] https:// www.academia.edu/9864164/Coding_An_Overview_and_Guide_to_Qualitative_Data_An alysis_for_Integral_Researchers.

Hermanus, E., S.A. Hutagalung, R.P. Pramana, F.N. Astini, E. Elmira V.T. Indrio, and W. Isdijoso. (2019) 'Diagnostic Study of Child Labour in Rural Areas (with Special Emphasis on Tobacco Farming)': 106 [online]   https://www.smeru.or.id/sites/default/files/publication/eclt_en. pdf.

Hsieh H-F and S.E. Shannon (2005) 'Three Approaches to Qualitative Content Analysis.' *Qualitative Health Research* 15(9): 1277–1288 [online] https://www.researchgate.net/ publication/ 7561647_Three_Approaches_to_Qualitative_Content_Analysis.

International Labour Organization (1973) ILO Convention No. 138 on the Minimum Age. (138).

International Labour Organization (2000) *Child Labour in Agriculture: a Survey of National Legislation*.

International Labour Organization (2002) *Children at Work: Health and Safety Risks* (Second ed.).

International Labour Organization (2004) *Safety and Health Fact Sheet: Hazardous Child Labour in Agriculture Tobacco*.

International Labour Organization (2007a) 'Towards an Internationally Accepted Statistical Definition of Child Labour : Children's Activities and Their Definitions.' [online] http://www.ilo.org/ ipecinfo/product/download.do?type=document&id=7871.

International Labour Organization (2007b) *Hazardous Child Domestic Work: A Briefing Sheet*.

International Labour Organization (2009) *Child Labour, Commercial Agriculture and Role of Tobacco Farmers*: 18.

International Labour Organization (2014) *An Analysis of Public Private Partnerhsip*.

International Labour Organization (2018) 'Amending the 18th ICLS Resolution concerning Statistics of Child Labour in Line with the 19th ICLS Resolution Concerning Statistics of Work, Employment and Labour Underutilization.' (October): 10–19 [online] https://www.ilo. org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms_ 633806.pdf.

Marshan, J.N., M.F. Rakhmadi, and M. Rizky (n.d.) *Prevalence of Child Marriage and Its Determinants among Young Women in Indonesia* [online] http://www.smeru.or.id/ cpsp/Paper, Abstact, CV/0102_Joseph-paper.pdf.

McKnight, R.H. and H.A. Spiller (2005) 'Green Tobacco Sickness in Children and Adolescents.' *Public Health Reports* 120 (6): 602–606.

OECD (2002) 'Evaluation and Aid Effectiveness No. 6 - Glossary of Key Terms in Evaluation and Results Based Management (in English, French and Spanish).' *Evaluation and Aid Effectiveness No. 6 - Glossary of Key Terms in Evaluation and Results Based Management (in English, French and Spanish)* [online] https://www.oecd.org/dac/evaluation/ 2754804.pdf.

Radsky. V., A. Nabiyeva, and U. Mikayilova (n.d.) 'Exploring Public-Private Partnership in Preschool Education Provision: Potential for Socio-Economic Development.' *Khazar Journal of Humanities and Social Sciences* 5–25.

Rogers, P. (2014) 'Theory of change.' *Methodological Briefs: Impact Evaluation 2* [online] https://www.unicef-irc.org/publications/pdf/brief_2_theoryofchange_eng.pdf.

Shelef, K., G.M. Diamond, G.S. Diamond, and H.A. Liddle (2005) 'Adolescent and Parent Alliance and Treatment Outcome in Multidimensional Family Therapy.' *Journal of Consulting & Clinical Psychology* 73: 689–698.

Suryahadi, A., A. Priyambada, and S. Sumarto (2005) 'Poverty, School, and Work: Children during the Economic Crisis in Indonesia.' *Development and Change* 36 (2).

Suryahadi, A., D. Suryadarma, and S. Sumarto (2006) *Economic Growth and Poverty Reduction in Indonesia: The Effects of Location and Sectoral Components of Growth* [online] <https://smeru.or.id/sites/default/files/publication/econgrow-swp-revised.pdf>

The SMERU Research Institute

Togunde, D.R. and E. Weber (2007) 'Parents' Views, Children's Voices: Intergenerational Analysis of Child Labor Persistence in Urban Nigeria.' *International Journal of Sociology of the Family* 33 (2): 285–301. Available at: http://www.jstor.org/stable/23070735.

Weiss, C.H. (1995) 'Nothing as Practical as Good Theory: Exploring Theory-Based Evaluation for Comprehensive Community Initiatives for Children and Families.' *New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts* (7): 65–92 [online] https://pdfs.semanticscholar.org/ff5a/3eea8d1d4e07a768ded6b426b425efde8f7c.pdf.

White, H. and Raitzer D.A. (2017) *Impact Evaluations of Development Interventions: A Practical Guide* [online] https://www.adb.org/sites/default/files/publication/392376/impact-evaluation-development-interventions-guide.pdf.

APPENDICES

APPENDIX 1

The Design of KESEMPATAN Programme

In 2016, SMERU conducted a diagnostic study on child labour in tobacco growing. In response to the results of the study, a stakeholder meeting was held, which led to the initiative in forming PAACLA as a commitment towards a joint action to eliminate child labour in the agricultural sector in Indonesia. The ECLT Foundation then carried out a scoping activity to identify programme relevancy and support for such a programme. It has resulted in the establishment of the KESEMPATAN programme. In implementing the KESEMPATAN programme, the ECLT Foundation partnered with a nongovernmental organization, Networks for Elimination of Child Labour (JARAK). JARAK then hired an individual consultant to develop the project document and design the programme.

To develop the programme design, the consultant discussed with JARAK and other partner NGOs, namely the Institute of Society and Development Studies (LPKP) and Indonesian Tunas Alam Foundation (Santai) as the programme implementers in the *kabupaten*. The programme was designed to suit the local context as well as the ability of the programme implementers to deliver the programme. In choosing the targeted villages as beneficiaries, JARAK asked LPKP and Santai to develop the village criteria as they have a better understanding of the local condition in the *kabupaten*. The design of the KESEMPATAN programme resulted in four main activities, namely strengthening the PAACLA institution; increasing the understanding, awareness, and knowledge of farmers/farm workers as well as stakeholders on the issue of child labour; enhancing national stakeholders' knowledge on the child labour issue; and establishing child-friendly villages. By conducting those activities, the programme is expected to reduce child labourers in tobacco growing area.

JARAK had designed the KESEMPATAN programme in detail, from its main activities, beneficiaries' criteria, to the monitoring and reporting process. However, during the process of developing the programme, there were some obstacles encountered by JARAK. Convincing the PAACLA members regarding the KESEMPATAN programme was not easy since some members, particularly those from the private sector, were sceptical about the programme. Members from the private sector expressed their concern about the program because the bureaucratic system in Indonesia is complicated. Therefore, JARAK gathered the PAACLA members and explained about the KESEMPATAN programme in a clearer and more detailed manner so that all members could understand the importance of the programme as well as how they could contribute to the programme. Another obstacle faced was the *kabupaten* government agencies' outdated data on the targeted villages. Thus, LPKP and Santai went directly to the targeted villages to confirm the data and information gained from the agencies and to identify other data and information needed.

APPENDIX 2

Sample Households' Livelihood Indicators

This appendix explains the household characteristics that are analysed through a liveable housing concept from BPS. BPS has seven indicators to determine liveable housing, as follows:

1. Living area: sufficient living area indicated by having more than 7.2m^2 of surface area per capita.

2. Roof: the main material for the roof is not made of fibre/palm/straw, or others outside of the categories defined.[32]

3. Wall: the largest surface area of the wall is not made of bamboo or any other materials outside of the categories defined.

4. Floor: the largest floor surface area is not made of the soil, cheap planks, or any other materials outside of the categories defined.

5. Sanitation: the household members have access to private or shared defecation facilities, and access to the gooseneck or pit type of toilet, and the final disposal of waste is either in a septic tank or a wastewater treatment plant.

6. Sustainable clean water:
   - The drinking water is not suitable if it is sourced from unprotected well, unprotected water spring, or surface water (lake, river, irrigated pool).
   - Drinking water sourced from a protected well or water spring is not suitable if the source is located less than 10 meters away from excrement disposal.
   - Drinking water sourced from an unprotected well, water spring, or surface water is not deemed sustainable clean water if the source of bathing/cooking water is also from any of the unprotected water sources.

7. Source of lighting: if a household does not have access to electricity (such as from the national electric company, or any other electricity provider), then it is deemed as not having a sufficient source of lighting (e.g. use of oil lamp/torch).

According to the BPS, if a household lacks three out of seven indicators above, it is classified to be living in a nonliveable housing condition. If a household only lacks two of the seven indicators, it is categorised as living in a moderately unliveable housing condition. Furthermore, if a household only lacks one of the seven indicators, it can be classified as living in a liveable housing condition. Looking at Table A1, we can see a good indication that in each *kabupaten*, roughly 60%–70% of households are classified as living in liveable housing (fulfil six or seven indicators). However, we want to investigate why are there still some households that are not in a liveable house and identify the causes for that. For instance, 8% of households in Probolinggo only meet four indicators, which might not be a large number, but roughly, 20 households are involved.

---

[32]We adopt the household characteristics set of questions from National Socioeconomic Survey (Susenas) 2018. To see the complete list of materials, please see Susenas 2018 or this study's instrument.

Table A1. Liveable Household Indicators

Number of Fulfilled Indicators	Probolinggo			Lombok Tengah		
	T	C	Total	T	C	Total
3 indicators	1.5	0.0	**0.8**	1.5	0.0	**0.8**
4 indicators	11.0	4.4	**8.0**	2.2	0.9	**1.6**
5 indicators	27.2	33.3	**30.0**	22.8	14.9	**19.2**
6 indicators	39.7	37.7	**38.8**	36.8	28.1	**32.8**
7 indicators	20.6	24.6	**22.4**	36.8	56.1	**45.6**

Source: Calculated from HH survey, SMERU research team, 2019.

Note: T: Treatment villages, C: Control villages.

Table A2 shows the percentage of households that do fulfil the liveable housing indicators. There are only 46% of household in Probolinggo which meet the requirements for a proper sanitation condition, meaning that there are roughly 54% of the sample households facing sanitation concerns. Another major concern in Probolinggo is the floor material for their house, given that around 37.2% (93 households) are reported to live on a dirt floor. This contrasts with the floor condition in Lombok Tengah, only 2.4% (six households) live on a dirt floor. Meanwhile, many households in Lombok Tengah live in an insufficient living space per capita. Despite both kabupaten having an average of 3–4 members in the household, but the average size of Probolinggo houses (70.2m^2) almost doubles the average size of houses in Lombok Tengah (43.4m^2). Another concern that applies to both *kabupaten* is sustainable water access. Less than 15% of households in each kabupaten access drinking water from an unprotected source (unprotected well, unprotected spring, and river/lake), but the issue lies in those who obtain their water source from a protected well/spring but within less than 10 meters from the final excrement disposal. This situation happens to 72 households in Probolinggo (28.8%) and 49 households in Lombok Tengah (19.6%).

Table A2. Percentage of Households That Fulfil the Liveable Housing Indicators

Indicators	Probolinggo			Lombok Tengah		
	T	C	Total	T	C	Total
Sanitation	44.1	48.2	**46.0**	61.0	77.2	**68.4**
Sustainable water source	66.9	71.1	**68.8**	70.6	83.3	**76.4**
Access to lighting	100.0	100.0	**100.0**	100.0	100.0	**100.0**
Living area	95.6	97.4	**96.4**	78.7	80.7	**79.6**
Rooftop	100.0	100.0	**100.0**	97.8	100.0	**98.8**
Wall	100.0	100.0	**100.0**	100.0	100.0	**100.0**
Floor	60.3	65.8	**62.8**	97.1	98.2	**97.6**

Source: Calculated from HH survey, SMERU research team, 2019.

Note: T: Treatment villages, C: Control villages.

We also observed the households' asset ownership. Most of the household own land (80.2%), motorcycles (68.4%), and refrigerators (24.6%). However, looking at each *kabupaten*, we can see that some assets are more frequently found than others in certain *kabupaten*. For instance, 91.2% of households in Probolinggo own a motorcycle; however, only 45.6% of the households own it in Lombok Tengah. One of the possible explanations for this could be based on necessity. Tobacco

farm workers in Lombok Tengah tend to work close to where they live, or they do not need to be as mobile given that they only work in certain phases of the tobacco plantation cycle.

Table A3. Household Assets

Assets	Probolinggo			Lombok Tengah		
	T	C	Total	T	C	Total
Gas container 5.5 kg/more	1.5	-	0.8	-	0.9	0.4
Refrigerator	44.9	34.2	40.0	11.0	7.0	9.2
Computer/laptop	5.1	2.6	4.0	0.7	-	0.4
Gold/jewellery (min. 10 g)	7.4	7.9	7.6	3.7	4.4	4.0
Motorcycle	90.4	92.1	91.2	44.9	46.5	45.6
Car	-	1.8	0.8	0.7	0.9	0.8
Flatscreen TV (min. 30 inch)	0.7	0.9	0.8	5.1	4.4	4.8
Land	75.7	71.9	74.0	85.3	87.7	86.4
Home ownership	89.7	90.4	90.0	86.0	87.7	86.8
None of the above	0.7	1.8	1.2	11.0	9.6	10.4

Source: Calculated from HH survey, SMERU research team, 2019.
Note: T: Treatment villages, C: Control villages.

Looking deeper into land ownership as an asset, households in Lombok Tengah (86.4%) own more land than households in Probolinggo (74%). Land ownership includes land for residence and/or for cultivation. Despite the higher land ownership in Lombok Tengah, the number of residences owned is roughly the same between the two districts. This could mean that the land owned by Lombok Tengah households is partially non-residential, which is land used for farming or other usages that are for non-residential purposes. In terms of residential land ownership, most households own a certificate of ownership (41.4%) or unwritten leasing agreement where the land belongs to an extended family/inheritance from an extended family member or parents (39.8%). The percentage of households with an unwritten leasing agreement reaches 53.5% in Lombok Tengah, but only 26.7% in Probolinggo.

APPENDIX 3

Food Security

The study also surveyed households with regards to their access to food and perception of the food's quality. The questions revolved around the variety of food, accessibility to food, nutrition in food, and quality of the food. The trends are similar across the two *kabupaten*, where most households answered that they are worried about not having enough food even though they are currently not running out of food. Both *kabupaten* do not have many households that have to suffer from not eating all day, are running out of food, must skip meals on certain days, or are unable to eat when they are hungry.
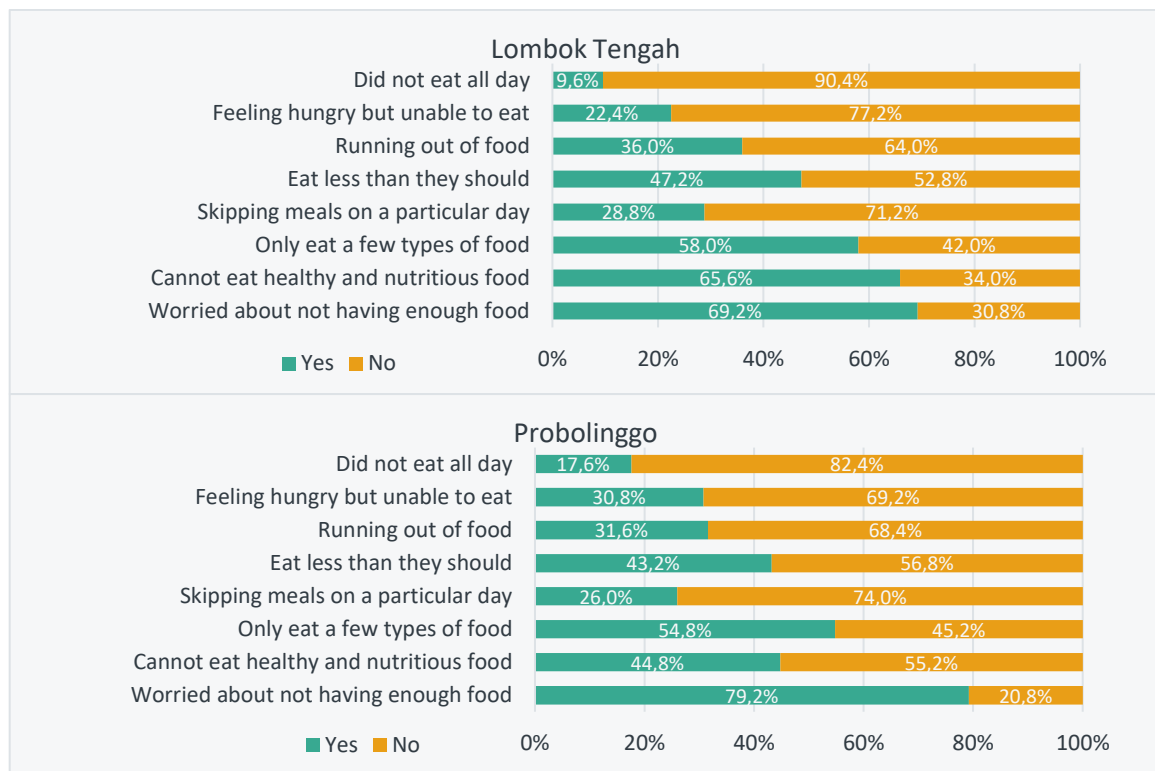
Figure A1. Food security household survey outcome
Source: Calculated from HH survey, SMERU research team, 2019.

Both *kabupaten* are concerned about the variety of food that they consume. The obvious difference between the two *kabupaten* lies in the degree of belief that their food is not nutritious enough. Up to 65% of households in Lombok Tengah believe that what they consume is not healthy or healthy enough, while only 42% of households believe so in Probolinggo. Despite some percentages of households in each *kabupaten* claiming that there were days when they did not eat all day, this can be interpreted as not eating a full meal all day rather than not consuming anything at all for the whole day. From the same survey on food accessibility, we also investigated the difference between the responses from the intervened villages against the control villages in each *kabupaten*. Figure A2 shows that there are no major differences in trends across villages, indicating that their socioeconomic conditions are similar.

Figure A2. Food security survey outcome based on village types

Source: Calculated from HH survey, SMERU research team, 2019.

APPENDIX 4

## Table A4. List of Activities in Tobacco Growing and Their Potential Hazards

List of activities in English	List of activities in Bahasa Indonesia	Hazards
Seedling	**Pembibitan**	**Seedling**
a0. Selecting and soaking seeds in water	a0. memilih jenis benih & merendam benih	Non-hazardous
a1. Preparing land for seedbeds	a1. mengolah tanah untuk bedengan	Exposure to sharp tools, heavy machinery
a2. Spreading seeds	a2. menebar benih	Non-hazardous
a3. Covering the spread seeds with hay	a3. menutup sebaran benih dengan sekam/ jerami	Non-hazardous
a4. Applying pesticide	a4. memberi pestisida	Exposure to hazardous chemicals
a5. Watering seedbeds	a5. menyiram bedengan	Non-hazardous
a6. Weeding grass on the seedbeds	a6. menyiang rumput di bedengan	Exposure to sharp tools
a7. Fertilizing seedbeds	a7. memupuk bedengan	Exposure to hazardous chemicals
a8. Cutting leaves (clipping)	a8. memotong daun (klipping)	Exposure to sharp tools
a9. Preparing seedbed cover	a9. mempersiapkan penutup bedengan	Non-hazardous
b0. Covering and uncovering seedbeds	b0. membuka/menutup penutup bedengan	Non-hazardous
b1. Preparing the tray	b1. menyiapkan tray	Non-hazardous
b2. Preparing seedbeds for the tray	b2. menyiapkan media tanam untuk tray	Non-hazardous
b3. Moving seeds from seedbeds to the tray	b3. memindahkan bibit dari persemaian ke tray	Non-hazardous
b4. Extracting seeds	b4. mencabut bibit	Non-hazardous
b5. Moving seeds from seedbeds to the tray	b5. memasukkan bibit ke wadah siap angkut	Non-hazardous
b6. Carrying seeds that has been collected	b6. mengangkut bibit yang sudah dikumpulkan	Non-hazardous
b7. Ploughing the land	b7. membajak lahan	Exposure to sharp tools, heavy machinery
b8. Making gutter	b8. membuat selokan	Exposure to sharp tools
b9. Ridging	b9. membuat guludan/gundukan tanah	Exposure to sharp tools
Planting	**Penanaman**	**Planting**
c0. Marking the planting spots	c0. menandai titik penanaman	Non-hazardous
c1. Watering the land	c1. menyiram lahan	Non-hazardous
c2. Planting	c2. menanam	Non-hazardous
c3. Fertilizing the plant(s)	c3. memupuk tanaman	Exposure to hazardous chemicals

List of activities in English	List of activities in Bahasa Indonesia	Hazards
c4. Using a water can to water the plant(s)	c4. menyiram dengan gembor	Non-hazardous
c5. Watering the plant(s) using the *turap* (sheet pile) system	c5. menyiram dengan sistem turap	Non-hazardous
Maintenance	**Pemeliharaan**	**Maintenance**
d0. Tilling the land	d0. menggemburkan tanah	Exposure to sharp tools
d1. Weeding the land/killing off insects	d1. membersihkan tanaman penganggu/penyiangan rumput di lahan/mematikan ulat	Exposure to hazardous chemicals
d2. Spraying the land with pesticides	d2. memberi pestisida di lahan	Exposure to hazardous chemicals
d3. Topping—cutting off the top leaves	d3. memotong pucuk daun/topping	Exposure to green tobacco leaves (hazardous chemicals), sharp tools
d4. Suckering—removing sprout	d4. membuang tunas/ketiak daun	Exposure to green tobacco leaves (hazardous chemicals)
d5. Re-ridging seedbeds	d5. meninggikan guludan/gundukan tanah	Exposure to sharp tools
d6. Applying Suckercide—a substance used to inhibit the growth of sprouts	d6. mengaplikasikan zat penghambat pertumbuhan tunas - suckerside	Exposure to hazardous chemicals
d7. Fertilizing	d7. memupuk	Exposure to hazardous chemicals
d8. Stalk-cutting	d8. pemotongan batang tembakau (stalk cutting)	Exposure to sharp tools
Harvesting	**Pemanenan**	**Harvesting**
e0. Harvesting tobacco leaves	e0. memetik daun tembakau	Exposure to green tobacco leaves (hazardous chemicals)
e1. Collecting tobacco leaves	e1. mengumpulkan daun tembakau	Exposure to green tobacco leaves (hazardous chemicals)
e2. Packing tobacco leaves	e2. mengepak daun tembakau	Exposure to green tobacco leaves (hazardous chemicals)
e3. Carrying tobacco leaves (from the field to home/warehouse)	e3. mengangkut daun tembakau (dari ladang ke rumah/gudang)	Exposure to green tobacco leaves (hazardous chemicals), heavy load
Post-harvesting	**Pascapanen**	**Post-harvesting**
f0. Preparing/cleaning pipes in the oven	f0. menyiapkan/membersihkan pipa dalam oven	Non-hazardous
f1. Cutting and preparing wood	f1. memotong, menyiapkan, atau menata kayu bakar	Exposure to sharp tools, heavy load,
f2. Placing the firewood in the oven	f2. memasukkan kayu bakar ke dalam tungku	Exposure to extreme heat/ide, to large amount of dust/fumes
f3. Arranging tobacco leaves	f3. menata daun tembakau	Exposure to green tobacco leaves (hazardous chemicals),
f4. Removing the midribs of tobacco leaves	f4. membuang tulang daun	Exposure to green tobacco leaves (hazardous chemicals),
f5. Folding tobacco leaves	f5. menggulung daun tembakau	Exposure to green tobacco leaves (hazardous chemicals),

List of activities in English	List of activities in Bahasa Indonesia	Hazards
f6. Arranging folded tobacco leaves	f6. menata gulungan daun tembakau	Exposure to green tobacco leaves (hazardous chemicals),
f7. Fine-chopping tobacco leaves	f7. merajang/mengiris daun tembakau	Exposure to green tobacco leaves (hazardous chemicals), exposure to sharp tools
f8. Curing tobacco leaves	f8. ngeler/meratakan/menjemur daun tembakau	Exposure to green tobacco leaves (hazardous chemicals),
f9. Folding cured tobacco leaves	f9. melipat hasil penjemuran	Non-hazardous
g0. *Penyujenan* (the process of bundling tobacco leaves using a stick prior to hanging them to be dried)	g0. menyujen	Exposure to green tobacco leaves (hazardous chemicals), exposure to sharp tools
g1. Tying tobacco leaves	g1. mengikat daun tembakau (penguntingan)	Exposure to green tobacco leaves (hazardous chemicals)
g2. Hanging tobacco leaves	g2. menggantung daun tembakau (pemeraman)	Exposure to extreme height, heavy loads
g3. Packing cured tobacco leaves	g3. mengepak daun tembakau kering	Non-hazardous
g4. Inserting tobacco leaves into the oven	g4. memasukkan daun tembakau ke dalam oven	Exposure to heavy loads
g5. Arranging tobacco leaves in the oven	g5. menata daun tembakau di dalam oven	Exposure to green tobacco leaves (hazardous chemicals)
g6. Temperature monitoring of the oven	g6. mengontrol suhu oven	Exposure to working long hours, extreme heat/fire
g7. Taking out leaves from the oven	g7. mengeluarkan daun tembakau dari dalam oven	Exposure to heavy loads
g8. Removing ties from the tobacco leaves	g8. melepaskan ikatan daun tembakau	Non-hazardous
g9. Piling up tobacco leaves	g9. menumpuk daun tembakau	Non-hazardous
h0. Sorting out tobacco leaves	h0. menyortir daun tembakau	Non-hazardous
h1. Carrying tobacco leaves into the storage unit	h1. mengangkut daun tembakau ke tempat penyimpanan	Exposure to heavy loads
h2. Arranging tobacco leaves in the warehouse	h2. menata daun tembakau di tempat penyimpanan	Non-hazardous
h3. Packing before selling	h3. mengepak sebelum di jual	Exposure to heavy loads, heavy machinery
h4. Flipping or adjusting trays when drying tobacco leaves	h4. membalik atau mengatur tampah saat pengeringan	Non-hazardous

Source: Hermanus et al. (2019)

APPENDIX 5

a) Minimum age to work - Control villages

b) Minimum age to work - Treatment villages
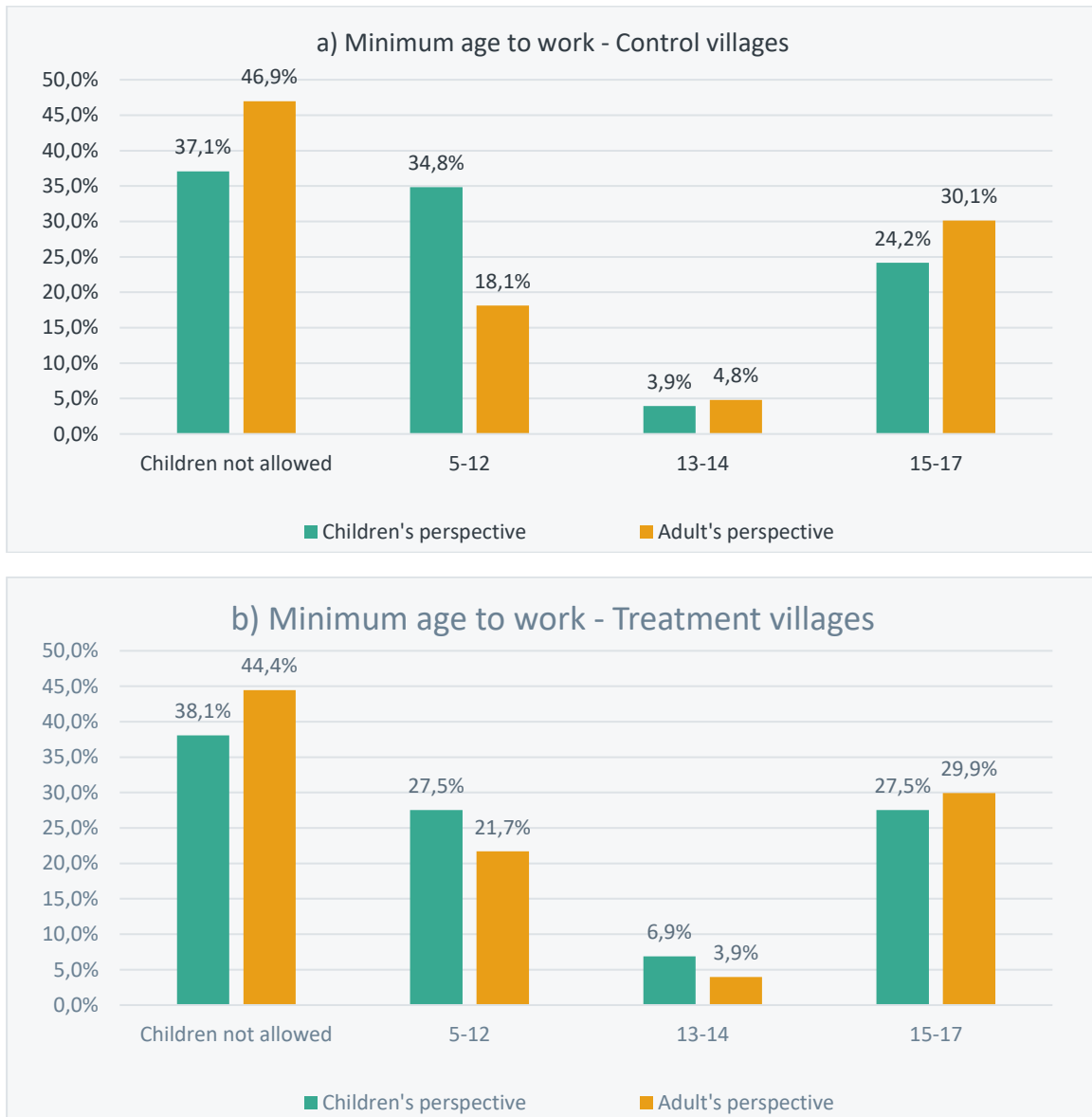
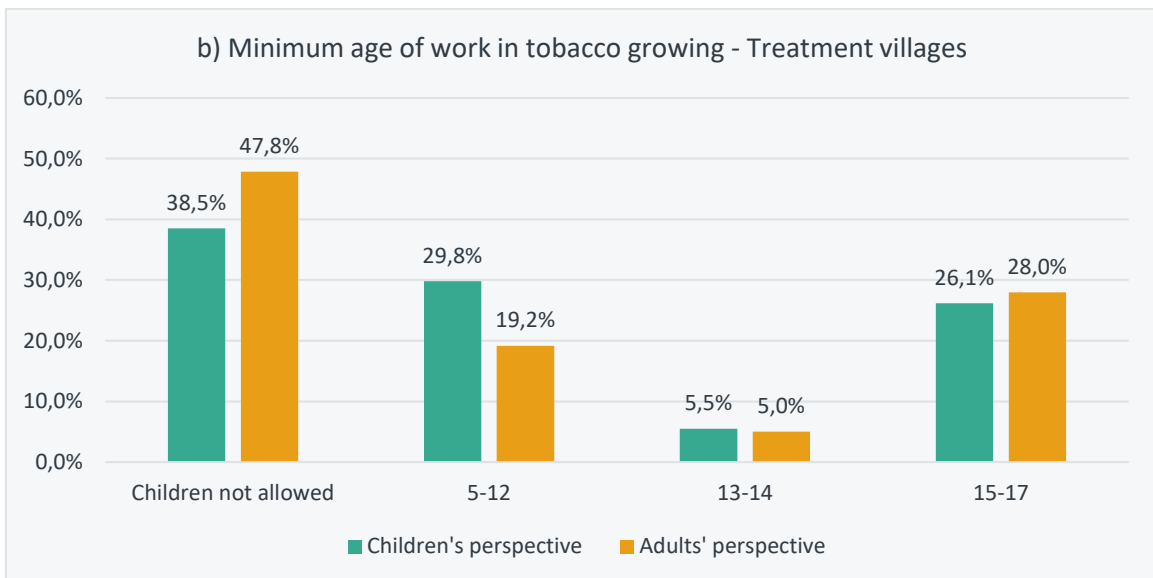**Figure A3. Perspective on the minimum age of work in general employment based on village types**
Source: Calculated from HH survey, SMERU research team, 2019.

APPENDIX 6

Figure A4. Perspective of the minimum age of work in tobacco growing
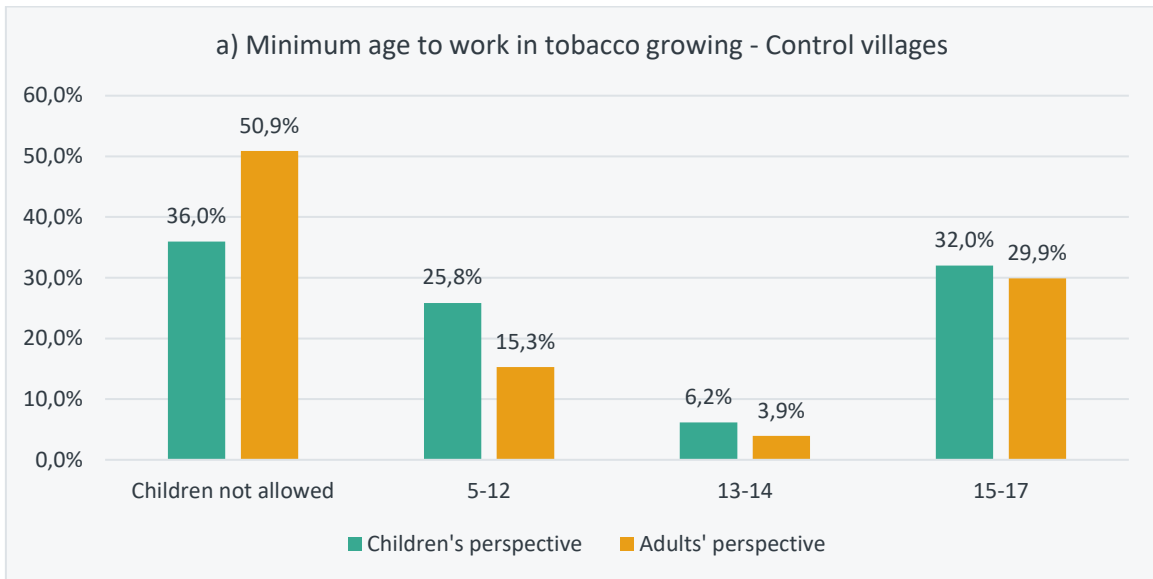
Figure A4. Perspective of the minimum age of work in tobacco growing
based on village types *Source*: Calculated from HH survey, SMERU research team, 2019.

a) Acceptable hazardous activities - Control villages

Activity	Adults' perspective	Children's perspective
Working at night	34,3%	24,2%
Working at heights	27,1%	13,5%
Working in extreme temperatures	37,6%	22,5%
Using sharp objects	53,9%	27,5%
Carrying heavy loads	32,5%	19,7%
Driving/operating a vehicle	32,1%	19,1%

■ Adults' perspective ■ Children's perspective

b) Acceptable hazardous activities - Treatment villages

Activity	Adults' perspective	Children's perspective
Working at night	30,8%	16,1%
Working at heights	30,1%	10,1%
Working in extreme temperatures	42,5%	19,7%
Using sharp objects	55,2%	23,4%
Carrying heavy loads	33,3%	14,7%
Driving/operating a vehicle	36,2%	19,7%

■ Adults' perspective ■ Children's perspective

Figure A5. Hazardous activities considered acceptable for children based on village types

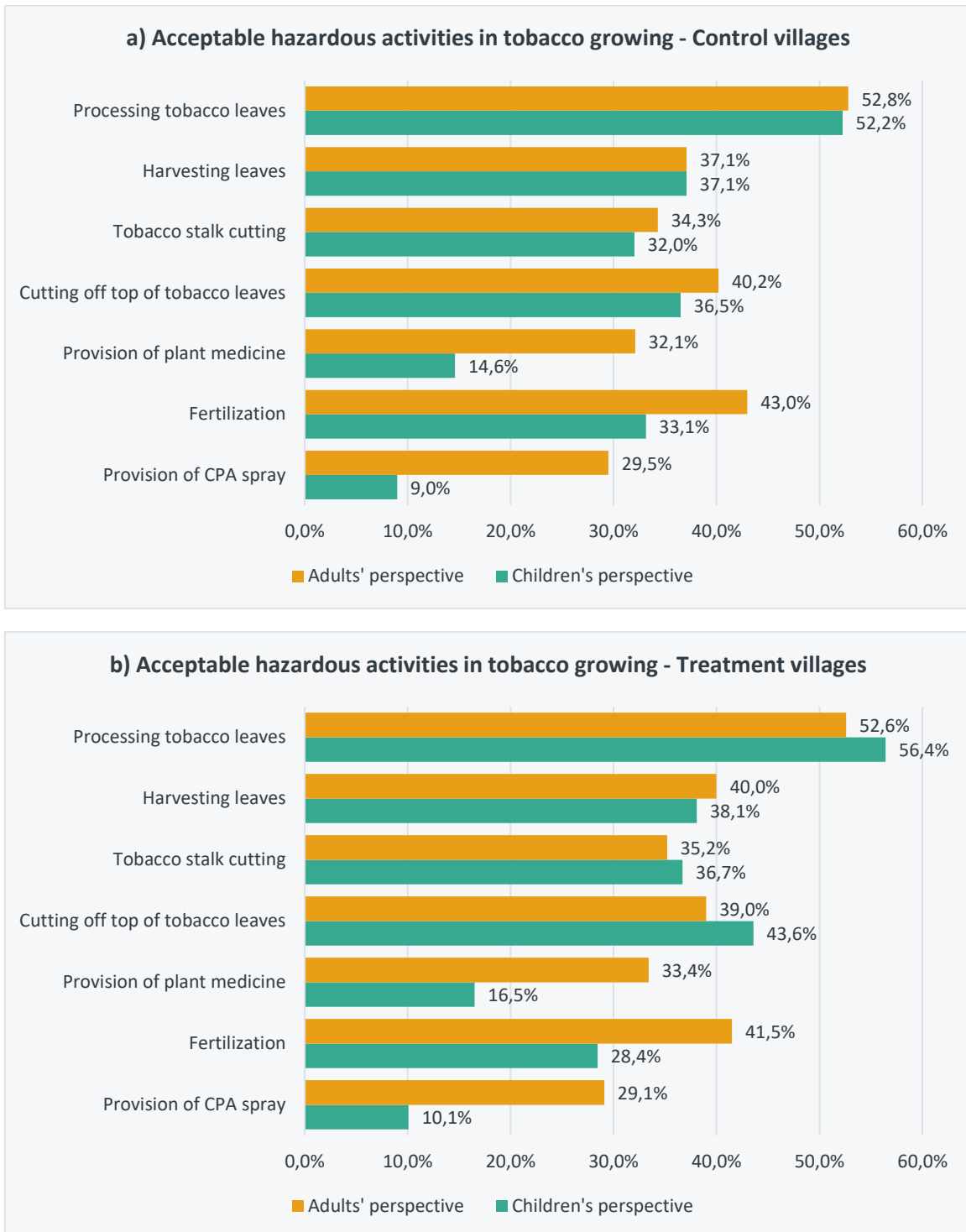*Source*: Calculated from HH survey, SMERU research team, 2019.

a) Acceptable hazardous activities in tobacco growing - Control villages

Activity	Adults' perspective	Children's perspective
Processing tobacco leaves	52,8%	52,2%
Harvesting leaves	37,1%	37,1%
Tobacco stalk cutting	34,3%	32,0%
Cutting off top of tobacco leaves	40,2%	36,5%
Provision of plant medicine	32,1%	14,6%
Fertilization	43,0%	33,1%
Provision of CPA spray	29,5%	9,0%

b) Acceptable hazardous activities in tobacco growing - Treatment villages

Activity	Adults' perspective	Children's perspective
Processing tobacco leaves	52,6%	56,4%
Harvesting leaves	40,0%	38,1%
Tobacco stalk cutting	35,2%	36,7%
Cutting off top of tobacco leaves	39,0%	43,6%
Provision of plant medicine	33,4%	16,5%
Fertilization	41,5%	28,4%
Provision of CPA spray	29,1%	10,1%

Figure A6. Hazardous activities in tobacco growing considered acceptable for children based on village types

Source: Calculated from HH survey, SMERU research team, 2019.

APPENDIX 9

Table A5. Evaluation Design Plan for Qualitative Methods

Level	Desired output and outcome	Methodology		
		Activities	Respondent	Data
National	Increase knowledge of PAACLA members on programme design and evaluation	In-depth interview	Selected PAACLA members	Capability to conduct M&E
	PAACLA members initiate prevention	In-depth interview	Selected PAACLA members	Identification of initiatives
	Strengthening PAACLA institution as a partnership	In-depth interview	Selected PAACLA members	Identification of PAACLA activities
National and District	Stakeholder has a clearer understanding of national commitment	Stakeholder mapping	Selected PAACLA members	Stakeholder and their initiatives on the issue of child labour
		In-depth interview	Identified stakeholders	Assessment of awareness on national commitment
District	All output	Extended programme impact analysis	LPKP Santai	Extent of achievement on each desired outcome
				Contributing and hindering factors
	Village enact child protection policies including the elimination of child labour	In-depth interview	Village Community and Empowerment Agency	Identifying existing village law and regulation on child labour
	Establishment of child-friendly villages model	In-depth interview	Child and Women Protection Agency and village officials	Identifying the replicable model of child-friendly villages
Village	Local cadres gain knowledge and skills to train on child labour issues	In-depth interview	Trained cadres	Methods on the transfer of knowledge on child labour issues
		In-depth interview	Beneficiaries	Assessment of trained cadres' skill in delivering the knowledge
		Focused group discussion	Trained cadres	Comprehension of child labour issues
	Farmers and farm workers can distinguish forms of child labour	In-depth interview	Beneficiaries Non-beneficiaries	Identifying children's involvement in tobacco growing; perspective of working children
		Focused group discussion		
	Village enact child protection policies including the elimination of child labour	In-depth interview	Village officials	Identification of village law or regulation in the issue of child labour
			Teachers	
			Health officials	
			Child forum cadre	

Level	Desired output and outcome	Methodology		
		Activities	**Respondent**	**Data**
	Establishment of child-friendly villages model	In-depth interview	Village officials	Process of developing child-friendly village
			Village officials of surrounding villages/village with similar characteristic	Extent of replicability of the designed child-friendly villages
	Reduction of children involved in a tobacco plantation	Community mapping	Children of beneficiaries	Identifying children's activities during the tobacco season
			Children of non-beneficiaries	
			Teachers	
			Children from the children's forum	

The SMERU Research Institute

Telephone : +62 21 3193 6336
Fax : +62 21 3193 0850
E-mail : smeru@smeru.or.id
Website : www. smeru. or.id
Facebook : @SMERUInstitute
Twitter : @SMERUInstitute
YouTube : The SMERU Research Institute

9 786237 492641

9 786237 492634