Study of Family Size Among Tenggerese in Indonesia

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This research examines how tradition, religion, livelihood, and environment could influence and construct family sizes in Tenggerese. The study was conducted with a realist ethnographic study approach. The results showed that despite having another profession, Tenggerese people still claim to be farmers. Tenggerese realised that there was limited land. The amount of land is fixed, but the population continues to increase. Then there must be an effort to limit birth rate to maintain a balance between the number of people and land. Tenggerese religion comes from ancestors. Out of the region around Bromo, then the same as leaving the ancestral land of Tengger.

**Keywords:** Family size, Family planning, Maternal health, Ethnography, Tenggerese.

**Introduction**

Family size can be seen in two perspectives. At the individual (micro) level, family size defines one aspect of one's family background or environment. In this context, the meaning and value of the family develop in the context of the local community environment. At the social or community level (macro), family size is an indicator of community structure that can vary from time to time, with concurrent implications for the development of individuals and social relations in different groups (‘Encyclopedia of Sociology’, 2001; Lai & Thornton,
2014; Shulgina, Elena M.; Fang et al., 2014; Fontaine, 2015). In a social context, family size plays an important role in the area of population. Family size affects the fluctuation in the population (Thomson, 2015).

In the context of the Tengger community, particularly in Wonokitri Village, Tosari Subdistrict, Pasuruan Regency, the tendency of increasing population, or in terms of the population referred to as the population growth rate, is observed to be lower than the population growth rate at the provincial and national levels. According to local traditional shaman informants, this low rate of population growth occurred in the eighties. The initiation of the family planning program from the government at that time was supported by the ownership of agricultural land in the increasingly narrow Tengger region.

In 2015, the population growth rate in Wonokitri Village was about 0.27%. Meanwhile, the 2015-2020 population growth rate released by the Central Statistics Agency based on the results of Indonesia's population projections for 2015-2020 (Mid-year/June) in Indonesia reached 1.08% (Badan Pusat Statistik, 2018). Natural growth rate (growth based solely on birth and death events) in Wonokitri Village for three consecutive years was 0.13% in 2015; 0.24% in 2016; 0.54% in 2017; and 0.00% in 2018. Generally, the population growth rates in the Wonokitri Village during four years were still far below the population growth rate at the national level.

The dominance of the Tengger tribe among people who live in rural areas on the slopes of Mount Bromo, especially in Wonokitri Village, makes people in these locations tend to have something in common. The majority of Wonokitri Village people are Hindu Tengger. The topography of the Wonokitri Village on the slopes of Mount Bromo with its fertile soil characteristics makes the local community almost entirely livelihood as farmers or cultivators (Utomo, Hidayat and Yuliati, 2015; Haryanto, 2016).

The low population growth rate phenomenon in Wonokitri Village is a reflection of the family size chosen by the local community. The construction of small family size is likely the influence of the inherent factors that characterise the identity of the local community. Traditional Tengger, Tengger Hinduism, and livelihoods as farmers or cultivators are factors that have the potential to support the construction of the family size. Based on this background, this study is intended to describe the construction of family size in the Tengger tribe. This research examines how customs, religion, livelihoods and the environment can influence and construct family sizes in the Tengger tribe. The results of this study are important as an input for the improvement of family planning policies based on local contexts in the future, especially those based on local cultural elements.
Research focus

This research will focus on the phenomenon of the family size, which was put forward as a research background. The family size used in this study is the number of nuclear family members. A family consists of two parents (who are married, both administratively by the state and by customary recognition) and their children (one or more) (The Editors of Encyclopaedia Britannica, 2018). The children are referred to as only biological children who are siblings or blood relatives. Some researchers include stepparents and mixed children including stepchildren and adopted children in the nuclear family (Haviland et al., 2007; Blackwell, 2010), but this study is limited to family members who have a biological relationship with both parents.

Methods

Study design

This qualitative research was conducted using a realist ethnographic study approach (Darmayantia, Ekawatib and Rachmat, 2020). The ethnographic method was chosen because of the phenomenon of small family size in the Tengger tribe which was felt to be very complex with many things interacting and influencing each other, which cannot be studied or examined using other approaches or methods. Ethnography with a realist approach seeks to describe the cultural situation of participants objectively based on information obtained directly from the participants in the research field. Ethnographic research methods require researchers to live together with research subjects to be able to feel what research subjects feel (natural context), in this case, the Tengger tribe community (Laksono, Soerachman and Angkasawati, 2016).

The main data collection methods were in-depth interviews and participatory observation. Interview guides were semi-structured, open and probing. Interviews were recorded and transcribed verbatim.

Study sites

This research was conducted for one year in 2019 at the Tengger Tribe in Wonokitri Village, Tosari District, Pasuruan Regency, East Java Province, Indonesia. Wonokitri Village was chosen because it is one of the villages on the slopes of Mount Bromo which, according to the local community, is considered to be still holding strong the tradition of the Tengger tribe compared to other villages in the Bromo Mountains region. Wonokitri Village was also
chosen due to locality, namely the location of the upper Tengger tribal settlement, approaching Mount Bromo, as the source and cultural centre of the Tengger tribe community.

**Study Informants**

Informants in the study at the beginning were Tengger's traditional shaman and the village head. The selection of the two men as key informants because of their positions as Tengger tribe figures who understand the culture and customs of the Tengger tribe. Furthermore, informants were obtained by purposive sampling. A total of 51 in-depth interviews were conducted in the community, traditional leaders, religious leaders, and government figures. The initial interview process was conducted formally by visiting the house of a traditional healer. This is done as an initial introductory step and explains the intention of the researcher to learn about the Tengger Tribe, as well as asking permission to record or recording to the informant. For subsequent interviews, the researcher attempted to conduct interviews following the daily cultural atmosphere. Interviews can be conducted while following or matching the ritual activities of the Tengger people.

**Data analysis**

Data were analysed using a phased forward research approach proposed by Spradley (Spradley, 1979). This approach was carried out as a process to help researchers find the domains, categories, themes, and patterns that emerge from the data. The temporary domain in the interview guide was used as the initial guide for analysing data. Themes and patterns emerge after looking at the data from all groups of informants. Data were coded manually by researchers. Trends and themes are relations and interactions of several cultural domains that are found to be related to the size of the Tengger family (Kusumawardani et al., 2015).

**Results**

The construction of family size in the Tengger tribe was very complex. This was the interaction of several cultural factors. The dominance of the Tengger tribe among people who live in rural areas on the slopes of Mount Bromo, especially in Wonokitri Village, makes people in these locations tend to have something in common. The majority of population in Wonokitri Village was Hindu Tengger. The topography of the Wonokitri Village on the slopes of Mount Bromo with its fertile soil characteristics makes the local community almost entirely livelihood as farmers or cultivators.
Informant Characteristics

Informant characteristics were collected from 51 people who had been interviewed in-depth. Furthermore, the characteristics of the informant's origin and role can be seen in Table 1.

Livelihood: "Everyone is a farmer, no one is not"

According to the Wonokitri Village profile data released by the Wonokitri Village government, by the end of 2018, the population of Wonokitri Village had reached 3,019 inhabitants. This number consists of 701 households. Based on sex, the population of Wonokitri Village consists of 1,481 men and 1,538 women. With an area of 112 square kilometres, the population density of Wonokitri Village is only around 27 people per square kilometre.

The low population density in the Wonokitri Village area was because most of the area was forest land under the control of the Bromo-Tengger-Semeru National Park (TNBTS), while the second-largest area was drylands, gardens or agricultural land. This division of land was based on the livelihoods of Wonokitri villagers, 90% of whom were garden farmers, while the other 5% were farm labourers. Other livelihoods undertaken by residents of Wonokitri Village were tour operators, which include tour guides, Jeep car service providers, motorcycle and motorcycle taxi drivers to go to Bromo, and also homestay providers. This group of tourism actors reaches around 30% of the entire population of Wonokitri Village.

Recording and reporting types of work administratively in Wonokitri Village prioritises formal rather than informal categories so that people of Wonokitri Village who work as teachers, health workers, and civil servants were recorded based on their formal work. Researchers get different recognition from the community, even though they have other professions, people in Wonokitri Village still claim to be farmers. According to them, this was because everyone has agricultural land.

The same recognition was also obtained from Wonokitri residents who carry out trade and tourism activities, including those who provide homestay services or rent a double axle car to go to Bromo. The reality on the ground indeed shows conditions that were following this recognition. They carry out formal professional activities, or tourism and trade services while still engaging in their agricultural activities; the difference was the division of time composition for each of these needs. This condition applies not only to the original Tengger community of Wonokitri Village but also applies to migrants who are married and settling in Wonokitri Village.
"Yes, everyone in Wonokitri Village is a farmer, sir. No one is not. That Pak M**no (paramedics) is also a farmer. The village apparatus is also a farmer... usually, they leave at 4-5 am to the garden... later they return at 8-9 am and then go to the village office... yes everyone is so sir, there must be to the garden..."
(Nar, 42 years old)

People in Wonokitri Village only occupy around 6.395% of the total area under the responsibility of the Wonokitri Village government. This figure is equivalent to 60.64 hectares. The remaining land that is not in the form of settlements and yards is dry fields, gardens or so-called dry agricultural land.

**Gender Preference**

In some tribes in the world, including in Indonesia, they tend to expect more boys than girls. Boys are positioned higher because of the cultural background of men who are expected to be the descendants of the descendants, carrying the surname for example. Although several other tribes in Indonesia also found a tendency to prefer girls. What about the trends in the Tengger tribe?

"It's the same, boy or girl, for the Tengger people. Just two children, the same as the neighbours here. You will also find a son-in-law, sir, it's the same..."
(Sur, 44 years old)

"No, sir. these two boys are enough. Yes, we will find a daughter-in-law, sir. hahaha... If it's here sir, boy or girl is it the same. It does not make any difference. You can also have a son-in-law later. so it's the same..."
(Suw, 25 years old)

"Yes, it does not matter, sir, boy or girl, as long as two children are enough, that's enough. Later after marriage, we can also have sons-in-law if our children are daughters and vice versa..."
(Sup, 64 years old)

The Tengger tribe in Wonokitri Village sees boys or girls as equal. All informants stated that they did not have gender tendencies in choosing children. They consider both the same. The tendency to equalise between men and women in the Tengger community order in Wonokitri Village not only is limited to recognition but also looks at the prevailing cultural
system, the inheritance system or law for example. The division of Tengger's parents' inheritance to their children does not at all distinguish between boys or girls. Both were considered to have the same position and rights in the matter of the distribution of inheritance. If a boy inherits a plot of land, then the girl also gets a plot of land that has the same value.

"It's the same, sir. if a Tengger person doesn't make any difference, sir, it's the same for a boy or girl. (Regarding inheritance) Yes, sir, it's the same here, different from the Hindus in Bali there. If it's all the same here..."
(End, 29 years old)

However, there are differences found in the matter of children treated. Empirically there were tendencies related to the birth order of children, between the first and second child, between the first child and the last child. This relates to the presence of parents at dusk. Who will they be with later? Although they also claim it is very situational, depending on the condition of parents and in-laws.

"If I join the last child, sir... the first child will join her husband, sir. Come live in his in-law's house..."
(Le, 40 years old)

"There is no sir. if it's here, it depends on the conditions, it also depends on parents-in-law too. if there is only one child, go there."
(End, 29 years old)

Tengger's parents in Wonokitri Village were often found to be with the last child. It turns out that this condition was found to occur accidentally. There was an unwritten village regulation, which causes the first child, who usually get married first, leave the main house first, leaving the last child at home.

"That's right if two children, all already married, then have made a home for the other child. The rules here should not be in one house there are three heads of households. So made another house. Yes, sir... here it is. parents have prepared a new house. so only the other one stays at home..."
(Sur, 32 years old)

However, according to the Tengger community in Wonokitri Village, that situation was still valid. The final decision must still be discussed together, because this situation concerns two
to three families, between the family of the parent and the family of the first child and the last child.

**Between Government Programs, Livelihoods and the Future of the Tengger Tribe**

The government's program to control population growth is to limit the number of children to only two children in one household. The program, better known as the Family Planning program, has become a national program that has been very heavily socialised since the era of President Soeharto's administration. This was also eventually adopted by the Tengger tribe in Wonokitri Village.

"Yes, two is enough, sir, like neighbours. This person here is an average of two, sir. Yes, there are three or three, but yes often because of a bump..."
(Pu, 21 years old)

"Yes, according to the government's suggestion, sir. You also allow the land to pack enough for your children and grandchildren..."
(Si, 60 years old)

It is empirically rare for nuclear families found to have more than two children. The average Tengger tribe family in Wonokitri Village has only one or two children. Even if it was found that there are more than two children, it was often a senior family (over 50 years old), or a young family who claims to be cheated. It is the unplanned or unintentional pregnancy because there is something unexpected.

"The first is 21 years old sir, then the second 16 years, and this little one is only 1 year... Conjunction sir. Hehehe... Yes, sir. I use injection contraception, it's just when I forget the injection schedule."
(Eni, 35 years old)

"Yes, my fault, I forget. At that time here (Bromo) was crowded sir. I have a lot of luck, so I stayed overnight sleeping with my husband. I forget it, I think the 26th, even though it should be the 16th. The next thing I know is great sir. Because I don't know if I am pregnant, so I still inject it when I get pregnant."
(Ri, 35 years old)
Practically, the Tengger tribe has its reasons for the small number of children. This relates to the livelihood of the Tengger as a farmer or cultivator which requires almost all of his time in the garden.

"Yes, so that it's not a hassle, sir. You have to go to the garden too. If now his brother can join in helping take care of him too. In the eyes of his grandmother too..."
(Sr., 28 years old)

"Not (added) sir. Difficult sir! Yes, it is... the scoop. Difficult, hassle. All brought to the garden. The milk costs are also expensive..."
(SrN, 55 years old)

The reasons stated were quite reasonable. Bringing children to the garden becomes very troublesome, especially in a large number of children. Another reason for choosing to only limit the number of two children was also raised by the Tengger tribe in Wonokitri Village. Consideration far ahead was a separate reason for Tengger people to choose to limit the number of births.

"Yes, now the land is still sufficient, sir. If there are many children, they fear that their children and grandchildren will lack..."
(Mar, 45 years old)

"Yes, those two children are also for economic reasons, so that the land is sufficient, for the future of our children. In the past, there were lots of children, but now it's only an average of two. The Tengger community is aware of the increasingly narrow land, must think about the future of children..."
(Ad, 31 years old)

The Tengger tribe community in Wonokitri Village as a whole depends on farming to realise that there were limitations to agricultural land. The amount of agricultural land was fixed, but the number of people continues to increase. Then there must be an effort to limit births to maintain a balance between the number of people and agricultural land.

In addition to practical and long-term reasons related to agricultural land, another argument was also made by the Tengger tribal community to limit the number of children to only two people. This reason is related to the future of the Tengger tribe as a whole.
"Yes, sir, this is enough, so that the land is enough for children, so they can support their children later. We want all of their children here (in Wonokitri). If children go out they are afraid of leaving their ancestors. It's not certain that once a year they can go home ... if they live in Kalimantan (another island) for example... Well... so that the customs will also be maintained, sir..."
(Bud, 47 years old)

The religion believed by the Tengger tribe in Wonokitri Village originated with ancestors, both ancestors who came from the descendants of Jaka Seger and Rara Anteng (early ancestors of the Tengger tribe), as well as their great-grandparents. Out of the region around Bromo, then the same as leaving the ancestral land of Tengger.

**Discussion**

Despite having other jobs, the Tengger still claim to be farmers. Tenggerese continues to do farming in their daily lives. This condition encourages them to address the limitations of existing agricultural land compared to the population growth of Tengger. Efforts to limit births to form small families is one of the conscious adaptation efforts to address these conditions. A study in rural India found a parallel phenomenon. The study stated that family size also influenced the adaptation of farm families to the drought that hit the region. The consumption strategy is carried out by reducing consumption. It is at this moment that family size comes into play (Sam *et al.*, 2020).

Another study in Pakistan also found an association between family size and measures of adaptation of farmers to extreme climate change. Small family size is one of the adaptation strategies to address increasingly minimal agricultural resources (Khan *et al.*, 2020). Another study in Indonesia found that land limitations could be anticipated with urban farming and vertically, although of course, this can only be done on a small scale (Nur’aini and Krisdianto, 2017).

The Tengger adaptation strategy that forces them to form small family sizes makes them not concerned about the gender of the children they have. Tengger people think they too will have daughters-in-law from different genders. The value of a child in a Tengger person does not matter whether a child is a boy or a girl. This is different from the value of children of most tribes in Indonesia where boys have a higher value (Ruslan, 2017; Laksono & Wulandari, 2019; Pratita and Laksono, 2020).
Efforts to reduce the family size of the Tengger people were also carried out so that they would not leave their ancestral lands. This is done so that the Tengger person does not lose his Tengger identity. For Tengger ancestors are the source of their entire livelihood. The involvement of ancestors in all aspects of life is also found in spirituality in Africa. A case study conducted on the Cameroon Grassfields stated that everything related to ancestors was closely related to the welfare of the community. This study focuses on the symbolism behind ancestral objects, the motives of mutual influence, and the making of meaning concerning the welfare of society (Alubafi and Kaunda, 2019).

A study of Aboriginal tribes in Australia found that maintaining identity for indigenous peoples is closely related to mental health. The study revealed the potential of improving mental health and social and emotional well-being in the effort to reclaim one traditional identity, language (Sivak et al., 2019).

Unlike the Tengger people, the Pagan in the United States dared to leave their ancestral land, the Pagan in Europe. Pagan Americans can still maintain their tradition amid native American religions. The success of the Pagan United States is to survive the tradition because they migrated colony, in groups. On the other hand, they continue to respect indigenous Americans as early landowners. It is an understanding that allows them to be side by side, dialogue, and cooperate with indigenous Americans in a place inhabited by their ancestors (McLoughlin, 2019).

Conclusions

Based on the results of the study, it can be concluded that the phenomenon of small family size that occurred in the Tengger tribe was related to livelihoods, gender preferences, and ancestral religion. Small family size was an adaptation strategy for Tengger in addressing land limitations and efforts to maintain the existence of Tengger's identity.

Ethic and Consent

The research had an ethical clearance that was approved by the ethical committee in the Faculty of Public Health, Universitas Airlangga (ethic number: 22/EA/KEPK/2019). Informed consent was used during data collection, which considered aspects of the data collection procedure, voluntary, and confidentiality.
### Table 1. Characteristics of Informants

<table>
<thead>
<tr>
<th>Informant</th>
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<td><strong>Gender</strong></td>
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<td>Male</td>
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<tr>
<td>Female</td>
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<td><strong>Role</strong></td>
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<td>Traditional/religious leaders</td>
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<td>Government leader</td>
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<td>Tourism actors</td>
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<tr>
<td>Health worker</td>
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REFERENCES


