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Orang Asli Perceptions toward Income Increment Program in Perak, Malaysia

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Abstract

In Malaysia, one of the programs organized by the Ministry of Rural and Regional Development to reduce hardcore poverty rates among the indigenous community of Orang Asli is the Income Increment Program (IIP). To ensure the program implemented is beneficial and accepted, the community's perception of the program is important to study. This study aims to identify the perception of Orang Asli participants towards the IIP, as well as to identify the socioeconomic status of the respondents. A total of 110 Orang Asli who participated in the IIP in the state of Perak, Malaysia involved in this study. Respondents were selected through a purposive sampling technique. Data were collected using questionnaires through a self-administered procedure with minimal monitoring by the researchers. The study showed that the majority of respondents work in agriculture and farming as their primary source of income while collecting forest produce and rubber tapping as part-time jobs. Vegetable, calamansi, and banana plantations, as well as cattle farming, tilapia farming, and stingless bee farming, are among the IIP projects undertaken by the Orang Asli community in the state of Perak. Overall, the study revealed that the majority of respondents had a positive perception of IIP in all dimensions tested namely the perception toward the IIP objectives, perception toward the role of JAKOA, and perception of the advantages of IIP. The positive perception of IIP is one of the key indicators that will influence the participants' involvement with this program in the long run. Future recommendations for current agricultural extensions such as IIP capture the significant fundamentals of the innovation systems perspectives to develop new technologies for smallholders that help the growth of crop yields and complete household food security. Therefore, responsible parties such as JAKOA should continue to play their role in encouraging and supporting this community so that they continue to be motivated, and open toward innovation, and strive to improve their socioeconomic status and quality of life.

Keywords: Perception, Socioeconomic, Poverty, Income Increment Program, Orang Asli

Introduction

Orang Asli is the only indigenous community living in Peninsular Malaysia. Referring to the distribution of indigenous peoples, 38% live in the interior, 61% in the suburbs, and 1% in urban areas. This community consists of three main tribes which are Senoi, Proto-Malay, and

Negrito, with 18 distinct cultural-linguistic sub-ethnic groups. Among the Senois, there are six sub-ethnic groups namely the Semai, Temiar, Che Wong, Mahmeri, Jahut, and Semaq Beri. The Proto-Malays consist of Kuala, Kanaq, Seletar, Jakun, Semelai and Temuan. The Negritos consist of six sub-ethnic groups namely the Kensiu, Kintak, Lanoh, Jahai, Mendriq, and Bateq (JAKOA, 2020). Based on the 2017 Malaysia Census which has been updated until 31 December 2019, the total of Orang Asli's population is 198,015 compared to 34,747 people in 1947 (JAKOA, 2020). These statistics show such a significant increase over 70 years. However, the Orang Asli has been identified as one of the vulnerable groups and is often associated with poverty. This is because they still have a high poverty rate of 31.16% in 2010 (JAKOA, 2011).

Numerous economic development programs have been implemented by the government through the Department of Orang Asli Development (JAKOA) for the benefit of the Orang Asli community in order to improve their quality of life, and socioeconomic status, and subsequently, get out of the cycle of poverty (Khir et al. 2018). Amongst the active programs are the State Economic Development Program, Extension Program, Entrepreneur Guidance Program, Construction of Retail Space Program, and most recently the Income Increment Program (IIP) (Khir et al., 2021). IIP is a program organized by the Ministry of Rural and Regional Development (KKLW) to reduce hardcore poverty rates in line with the government's aspirations and was introduced by JAKOA in 2014. Agricultural machinery equipment, fishery input materials, fishing equipment, vegetable projects, sweet potato crops, lime crops, tilapia fish farming, village poultry, and cattle farming are among the assistance provided in this program. Over the four years, a total of 394 participants received assistance of up to RM10, 000.00, depending on the scope of the project, individually or as a group (Khir et al., 2019).

Perception can influence the success level of a development program (Hamid et al., 2013). Perception is the process of how an individual selects, manages, and interprets the entry of information to create a description of the meaningful whole (Kotler, 2000). The concept of perceptions is a key dimension in understanding the diffusion of ideas and innovations. Although a new idea may be considered an advantage by experts in any field, a particular actor may not perceive the innovation in a similar manner. Perception is the way an individual responds to any sense or impressions which he detects (Lindesmith & Strauss, 1956). Besides, Rogers (2003) suggests that it is not objective profitability but the adopter's perception of profitability that determines the rate of adoption. Definitely, perception is an essential feature that needs attention.

Researchers believe that a positive perception of the IIP will give a positive impact on indigenous participants psychologically, socially, and economically. However, a specific study examining the perception of Orang Asli towards IIP has not been implemented. In addition, participants' perceptions are important to discover as they can respond from an indigenous perspective, particularly in enhancing the program involved. Therefore, this study intended to identify the socioeconomic status and perceptions of Orang Asli in the Income Increment Program.

Perception of Indigenous People towards Socioeconomic Programs

Perception is the process of humans interpreting and organizing sensations to produce a significant experience (Lindsay & Norman, 2013). Meanwhile, Koentjaraningrat (2010) specified perception as the realization of human brain development and it appears as a view of the phenomenon. The interdisciplinary concept of perception is complex and frequently

discussed at length in social psychology. Generally, the concept of perception directs the reader to an understanding of sensory information that mentions the mechanism of touch, taste, smell, vision, and hearing. All of these are stimuli that are accessible to an individual and interpreted in a personal way. Autonomous motivation or an individual's innate behavior plays a vital role to shape perception (Ryan, Huta, & Deci 2008). In a detailed manner, intrinsic motivation helps farmers to seek knowledge through participation in extension programs and influences other individuals' decisions to participate in agricultural extension programs (Charatsari et al., 2017). Nevertheless, the perception of farmers toward extension activities and the reasons related to such participation at the grass-roots level has not been fully discussed (Charatsari et al., 2017). In India and Bangladesh, the majority of the farmers show varying levels of willingness to participate in extension programs (Uddin, Gao, & Mamun-Ur-Rashid, 2016). A well-function of extension program must greatly promote changes in agricultural productivity and farm income. Besides, an extension program can expose rural farmers to new technologies and alternative practices (Ghimire & Huang, 2015).

Globally, numerous types of research have been done to explore the positive perception of indigenous people towards income increment programs. An example, research has examined how farmers perceive agricultural risks (Legesse & Drake, 2005) and how farmers respond to particular perceived risks (Tzouramani et al., 2014), factors affecting farmers' perception and strategies (Zeweld et al., 2017) and barriers to risk management (Ochieng et al., 2017). The positive perception of indigenous people such as farmers towards IIP is influenced by their response to the risk concerned (Mankad, 2016). The majority of them extremely believed IIP from the local government could minimize the potential risk in their agricultural activity. Based on how they perceive risks, farmers apply a lot of technics to minimize the impacts of agricultural risks including supporting local government programs (Bergfjord, 2009). On top of that, the positive perception of farmers towards IIP was successfully shown by many factors such as lack of transparent information, inadequate institutional support, and lack of capital (Woods et al., 2017). Other than that, the main reason why they have a positive perception of IIP is the IIP itself could reduce the three main potential risks in agricultural activity. The main potential risk is a market risk due to agricultural production strictly depending on demand and market price (Hardaker et al., 2015). Hence, the second potential risk is a biosecurity threat (Waage & Mumford, 2008), and lastly the human risk typically to human health such as pesticide usage and farmers' diseases. The human risk is related to farming activities that depend on physical labor where humans are an essential asset to agricultural production (Morera et al., 2014). Other than that, the majority of the farmers are strictly concerned regarding institutional risks such as the changes in government policies that would affect the capability and sustainability of farming enterprises (Flaten et al., 2005).
Numerous studies have been conducted to investigate how socioeconomic factors influence farmers' perceptions of IIP. The positive perceptions are different between male and female farmers (Kiama et al., 2016). Female farmers were particularly concerned about the important roles of education and extension services in farming compared to male farmers (Ullah et al., 2015). Education has been positively correlated to farm business risk, personal risk, and off-farm income (Borges & Machado, 2012). In addition, findings have proven the mixed findings regarding farmers' ages and favorable perceptions. In South Africa, older or veteran farmers were more concerned about the potential shortage of farm labor than younger farmers (Kisaka & Obi, 2012). Borges and Machado (2012) in their study however mentioned that age did not suggestively affect farmers' risk perceptions in Brazil. Few studies described those

farmers who managed larger farms were mostly concerned with production risks (Nmadu et al., 2012). Therefore, the geographic site of farms had an extensive impact on farmers' risk perceptions (Kabir et al., 2016) as example Norwegian farmers with convenient transport need to pay attention to production risk when compared to farmers in remote locations. Besides, factors affecting farmers' perceptions of IIP are also associated with weather-related risks. Due to the impact of climate change on agricultural activity, weather-related risk has acknowledged enormous attention from researchers and farmers (Wheeler & Von Braun, 2013). Fewer research (Lewerin et al., 2015) critically looks at the socio-economic factors affecting farmers' perception of IIP. Education levels, the size of the farm, and farmers' experience in farming were found to have an important influence on how farmers perceive and adopt IIP and risk management strategies (Hall et al., 2003).

In Malaysia, there are studies on the perception of the Orang Asli community toward development programs. One of them is a study of Orang Asli's perception of the Agricultural Land Development Program (ALDP) (Hamid et al., 2013). The study involved 170 Orang Asli from Jakun and Semelai sub-groups who participated in the ALDP for oil palm plantations in RPS Kedaik, RPS Bukit Serok, RPS Runchang, and RPS Bamboo, in Pekan and Rompin, Pahang. The survey initiate that the majority of respondents had less than RM1000 per month. Generally, respondents had a moderate level of perception of ALDP with a mean value of 61.994. This finding indicates a positive sign that the minority community is also at the forefront of the development process. Most respondents believe that ALDP can improve their lives. Positive acceptance will affect indigenous peoples' confidence and involvement in the long term. The positive perception of indigenous peoples toward ALDP demonstrates that they can adapt agricultural innovations to their economic life. In addition, Harun et al (2010) revealed that the Orang Asli in RPS Runchang have a positive perception of ALDP as long as their lives are getting better. They appreciate the financial assistance from the agriculture project by FELCRA. For Orang Asli, cultivation practices are able to secure their livelihood compared to depending on forest products. However, they perceived that in long term, this program conducted by FELCRA would not be able to bring them out of poverty. Lim (1997) mentioned that the Orang Asli in ALDP perceived that RISDA has the trustworthiness to develop their traditional land compared to FELCRA. The majority of participants in ALDP achieved a good and high perception toward ALDP to show their confidence in the program and development agencies in order to help them gain more benefits from their participation.

In Malaysia, the introduction of IIP has had a number of effects on the Orang Asli. In terms of development initiatives, household income, and economic vulnerability, the impact of IIP could be recognized. IIP plays a significant role in poverty alleviation among Orang Asli in terms of development projects. Rural women's business and social status have been shown to improve as a result of IIP programs (Chan & Abdul Ghani, 2011). Apart from personal development, it has the potential to raise entrepreneur income and meet their fundamental necessities (Hassan & Ibrahim, 2015). In addition, the introduction of IIP has an impact on Orang Asli's household income. IIP's parallel implementation with Amanah Ikhtiar Malaysia's microcredit on household income has been widely documented. For example, Al-Shami et al (2017) investigated the influence of AIM's productive loan on the welfare and empowerment of women in their households. Microcredit had a beneficial impact on borrowers' household income and personal asset acquisition, according to their study, which polled 495 old and new borrowers. In their study, Samer et al (2015) used data from 780 former and new AIM

consumers from rural and urban borrowers in Selangor and Melaka. Microcredit had a beneficial influence on household income, according to the data.

Governments acknowledge the vulnerable to poverty and implement safety net policies to assist low-income households as the economy evolves. Microcredit loans appear to be used for income-generating activities such as microenterprises, farming, and small-scale industries. When these operations are simplified through enterprise development training, the amount of economic vulnerability among low-income households may be reduced. Al-Mamun et al (2014) conducted research in Peninsular Malaysia on the influence of AIM's microcredit program on the level of economic vulnerability among 333 impoverished households. Participation in AIM programs reduced economic vulnerability, according to the findings. In a study focusing on eight randomly selected AIM urban branches and seven randomly selected AIM rural branches, Al-Mamun and Mazumder (2015) found that AIM's microcredit programs reduced economic vulnerability. Based on the foregoing discussion, implementing social development programs such as AIM has a positive impact on the Orang Asli, and IIP is a continual program aimed at improving the Orang Asli's socioeconomic situation.

Methodology

Sample and Location of Study

The present study was carried out in four districts of the state of Perak in Malaysia: Kuala Kangsar, Batang Padang, Hulu Perak, and Kinta. Among the locations involved are Kg Air Bah, RPS Jernang, Kg Sungai Merbau, Kg Tersusun Kinjang, Kg Sek. Temoh, Kg Pos Bersih, Kg Suak Petai, Kg Chadak, Kg Lanar Pos Perwor, Kg Lawai, and Kg Ulu Bekor. According to JAKOA statistics, 46 Orang Asli received IIP allocations in Perak between 2015 and 2017. As a result, an estimated 138 Orang Asli (46 x 3 per project) were involved as project leaders and members. As proposed by Krejcie and Morgan, a sample size of 103 people was selected based on the population size (N = 138). However, the study received 110 responses. Respondents were selected through the purposive sampling technique, and the IIP project manager was given special consideration. If the IIP project leader was not available, the IIP project member was in charge of participating in the study.

Procedure and Instruments

The participant’s perception of IIP was entirely developed by the researchers by adapting the perception instrument on the Agricultural Land Development Program among the Orang Asli by (Hamid et al., 2013). For the present study, the participant’s perception of IIP includes 16 items that represent three dimensions, namely 1) Perception toward IIP Objectives, 2) Perception toward JAKOA’s Role, and 3) Perception toward the IIP Advantages. Respondents were required to indicate a response based on the 5-point Likert Scale from "strongly disagree (1)" to "strongly agree (5)". Higher scores indicate that respondents have a better perception of IIP. The level of participants' perception of IIP was calculated using minimum and maximum value scores, which were divided into a mean (weighted mean) of 1.00 until 2.33 indicating a low level, a mean of 2.34 until 3.67 indicating a moderate level, and a mean of 3.68 to 5.00 indicating a high level. Internal consistency for this instrument is within an acceptable range of Cronbach's alpha values, 0.795 to 0.831 across all dimensions.

Analysis of Data

The data were statistically analyzed based on frequency, mean, weighted mean, standard deviation, minimum, and maximum values to determine respondents' perception of IIP.

Results and Discussions

Socio-demographic Background

Table 1 shows the demographics of Orang Asli participants in Perak's Income Increment Program (IIP). The majority of respondents (77%) were men, while 33 percent were women (30%). Participants range in age from 17 to 75 years old, with an average age of 39.9 years. In terms of marital status and household size, the majority of respondents (80%) were married and had fewer than five households (75.5%). In terms of Orang Asli ethnic distribution, Semai received the most responses (62.7%), followed by Temiar (22%), and Lanoh (17.3%). The majority of respondents (35.5%) were Muslim, followed by Animism (34.5%), Christian (28.2%), and Bahai (1.8%). Furthermore, 46 respondents, or nearly 41.8 percent, did not attend formal education. Almost 36.4 percent of respondents attended primary school, while 19 percent attended secondary school. Finally, only 2.7 percent of the population received tertiary education.

In terms of employment and income distribution, the majority of respondents (33.6%) work as cash crop farmers as their primary occupation, followed by breeders (25.5%), rubber tappers (17.3%), and forest product suppliers (9.1%). Respondents who work in oil palm plantations, as salaried employees, and as business owners are also included. Unemployment affects a small proportion of respondents (1.8 percent), primarily housewives. As a result, the majority of respondents (31.8 percent) worked as forest product suppliers, demonstrating that Orang Asli was still attached to the forest as their traditional source of income (Khir et al. 2021). Overall, respondents' monthly household income averaged RM929.54 (S.D. = 745.51).

Table 1
Socio-demographic Background of Respondents (n=110)

Variable	n	(%)	Mean	S.D.	Min	Max
Sex						
Male	77	(70.0)				
Female	33	(30.0)				
Age			39.9	12	17	75
<20	4	(3.6)				
20-39	47	(42.7)				
40-59	49	(44.5)				
>60	10	(9.1)				
Marital Status						
Single	15	(13.6)				
Married	88	(80.0)				
Single Mother/Father	7	(6.4)				
No. of households						
4 people and below	83	(75.5)				
5 people and above	27	(24.5)				
Sub Ethnic						
Lanoh	19	(17.3)				

Semai	69	(62.7)				
Temiar	22	(20.0)				
Religion						
Bahai	2	(1.8)				
Islam	39	(35.5)				
Kristian	31	(28.2)				
Animism	38	(34.5)				
Education Level						
No education	46	(41.8)				
Primary school	40	(36.4)				
Secondary school (lower)	16	(14.5)				
Secondary school (upper)	5	(4.5)				
Tertiary	3	(2.7)				
Main Job						
Oil palm worker	4	(3.6)				
Cash crop farmer	37	(33.6)				
Businessman	2	(1.8)				
Rubber tapper	19	(17.3)				
Forest product supplier	10	(9.1)				
Breeder	28	(25.5)				
Salary worker	8	(7.3)				
No job	2	(1.8)				
Part-Time Job						
Oil palm worker	6	(5.5)				
Cash crop farmer	3	(2.7)				
Rubber tapper	21	(19.1)				
Forest product supplier	35	(31.8)				
Breeder	3	(2.7)				
Salary worker	14	(12.7)				
No job	28	(25.5)				
Household Monthly Income			929.54	745.51	150	5000
RM499 and below	25	(22.7)				
RM500-RM999	44	(40.0				
RM1000-RM1999	33	(33.0)				
RM2000 and above	8	(7.3)				

Table 2 contains information on the respondents' participation in the IIP. The majority of respondents (56.4%) were involved in crop projects such as calamansi, bananas, and vegetables, while the remainder (41.9 %) were involved in livestock programs such as goats,

cattle, tilapia, and stingless bee farming. The pastry project only had two respondents. The average project duration was one year (42.7 percent), and only 21.8 percent of respondents were project leaders. After joining the IIP, the average respondent earns an increase of RM96.81 per month, with a maximum increase of RM550. However, because the project was just starting as a vegetable crop, some respondents (51.8 %) had no increase in income, and there were also projects that failed to run, such as the banana plantation.

Table 2
Participation in the IIP

Variables	n	(%)
Type of Project		
Pastry	2	(1.8)
Calamansi farming	12	(10.9)
Banana plantation	20	(18.2)
Vegetable crops	30	(27.3)
Tilapia farming	10	(9.1)
Goat farming	7	(6.4)
Stingless bee farming	11	(10.0)
Cow farming	18	(16.4)
The Year of Project Begin		
2014	33	(30.0)
2015	31	(28.2)
2016	3	(2.7)
2017	43	(39.1)
The Duration of Project		
Six months	17	(15.5)
One year	47	(42.7)
Two years	15	(13.6)
Three years	8	(7.3)
Four years	23	(20.9)
Role in IIP		
Project leader	24	(21.8)
Project member	86	(78.2)
Number of Group Members		
4 people and below	54	(49.1)
5 people and above	56	(50.9)
Income Increment		
No Increment	57	(51.8)
Less than RM200	23	(20.9)
RM200 – RM399	24	(21.8)

RM400 above	6	(5.5)
Mean: 96.81, S.D.: 128.91		
Perceived IIP Successful Level		
Strongly disagree (SD)	9	(8.18)
Not agree (NA)	25	(22.73)
Agree (A)	49	(44.55)
Strongly Agree (SA)	27	(24.55)

Following that, respondents were asked about how strongly they agreed or disagree with their successful project on a 4-point scale of strongly disagree (SD = 1) to strongly agree (SA = 4). According to the survey, the majority of respondents (44.5 %) agreed the project they were working on was successful, followed by 24.55 percent are strongly agreed. In contrast, 22.73 percent of respondents disagreed and 8.18 strongly disagreed with the project they were working on. Based on the conversation and discussion during the data collection, the respondents perceived and believed that their project was successful as long as the project was still running and continued. A number of respondents who were newly involved with vegetable and calamansi farming felt that their project was successful because they managed to plant well even though they had not yet harvested the crop (Khir et al., 2021). Moreover, the increasing income from the project also certainly influences the respondents' perception of the success of their project. Despite the slight increase in their income, most respondents still showed success. However, respondents who considered their project unsuccessful were among those unable to proceed with the project. For example, the banana plantation project failed because the soil type was not suitable for the plantation. In addition, some of the respondents involved with cattle and tilapia farming also felt that their project failed when their livestock died, and they did not get any income.

The Perceptions of Orang Asli toward Income Increment Program

In this section, respondents' perception toward IIP is divided into three dimensions namely the perceptions toward IIP objectives, the role of JAKOA, and the advantages of IIP. The results of the item analysis of respondents' perceptions of IIP objectives are presented in Table 3. The study shows that the respondents have a positive and good perception of all the items studied related to IIP objectives (mean = 3.77 to 4.06). The finding revealed that the respondents perceived the IIP provides employment opportunities for Orang Asli and family members as the highest mean score (4.06). The respondents also perceived that IIP enhances participants' knowledge, provides adequate allocation and requirements, increases the income of participants and families, and can reduce poverty among Indigenous people. A positive perception of the IIP objectives is very important and will give a positive impact on indigenous participants psychologically, socially, and economically.

Table 3
Perceptions toward IIP Objectives

Item	Statement	n	Mean	S.D.	Min	Max
3	The Increment Program (IIP) provides employment opportunities for 'Orang Asli' and family members.	110	4.06	0.79	2	5
5	Training and courses in IIP have increased participants' knowledge	110	3.96	0.84	2	5
4	The IIP provides adequate funding and requirements.	110	3.91	0.70	2	5
1	The IIP increases the income of participants and families.	110	3.81	0.65	2	5
2	The IIP can reduce poverty among Indigenous people.	110	3.77	0.91	1	5

Perceptions of JAKOA's role are presented in Table 4. The study revealed that respondents had a good and high perception of each statement regarding the role of JAKOA in IIP implementation (M = 4.05 to 4.17; S.D. = 0.61 to 0.81). For respondents, JAKOA has played a significant role in promoting Orang Asli's participation in the IIP, monitoring IIP projects continuously, listening to project participants' issues, and always helping to resolve issues related to the project. In fact, the respondents were convinced of JAKOA's ability to assist IIP participants. The findings indicated that The Department of Orang Asli Development, abbreviated as JAKOA, plays a good role as the Malaysian government agency entrusted to oversee the affairs of the Orang Asli. As a committed organization and positively perceived by the Orang Asli, JAKOA needs to wisely organize and well-promote the programs that can provide various benefits to the Orang Asli.

Table 4
Perceptions toward JAKOA's role

Item	Statement	n	Mean	S.D.	Min	Max
10	JAKOA is always helpful in solving problems related to projects carried out by participants.	110	4.17	0.63	2	5
8	JAKOA encourages "Orang Asli" to participate in the Income Improvement Program (IIP).	110	4.14	0.67	2	5
9	JAKOA always listens to problems related to projects experienced by participants.	110	4.13	0.61	2	5
6	I believe in the ability of JAKOA agencies to assist participants in the Income Improvement Program (IIP).	110	4.11	0.64	1	5
7	The Income Improvement Program (IIP) is monitored continuously by JAKOA.	110	4.05	0.81	1	5

Next, the analysis of respondents' perceptions of the advantages of IIP is presented in Table 5. The respondents have a positive and good perception of all the items related to IIP advantages (mean = 3.73 to 4.18). This study discovered that the IIP helped Orang Asli to develop their living standards with the highest mean score (M = 4.18; S.D. = 0.71). The study also showed that the participants benefited from the program, IIP provided knowledge and experience to participants and various assistance was provided to IIP participants such as assets, premises, workshops, business space, machinery, and raw materials. Moreover, respondents also agreed that most IIP projects were implemented in groups and they received guidance from relevant agencies.

Table 5
Perceptions toward the advantages of IIP

Item	Statement	n	Mean	S.D.	Min	Max
12	This program helps develop Orang Asli's living standards.	110	4.18	0.71	2	5
11	Participants attain a benefit as the program is managed by JAKOA	110	4.09	0.64	2	5
16	IIP provides participants with knowledge and experience.	110	4.06	0.59	2	5
14	Various assistance is provided to IIP participants such as assets/premises/workshops/business space/machinery equipment and raw materials.	110	4.00	0.78	1	5
13	Most IIP projects are implemented in groups	110	3.89	0.62	2	5
15	IIP participants receive guidance from relevant agencies.	110	3.73	0.87	1	5

The Level of Orang Asli Perceptions toward the IIP

Table 6 below shows the scores and levels of Orang Asli's perception of IIP. The level of Orang Asli's perception of IIP is divided into three levels, low, moderate, and high. From the results, the perception level of the IIP objective showed that the majority of respondents reached a high level followed by a moderate level (M=19.53; S.D.=2.91). High scores indicate that respondents have good perceptions of IIP objectives, while low scores indicate that respondents have different perceptions.

Furthermore, the majority of respondents had a high level of perception of the JAKOA role (85.5%) with a mean value of 20.62 (S.D = 2.62). The analysis also showed that 14.5 percent of respondents had a moderate level of perception. Higher scores indicate that respondents have a better understanding of the role of JAKOA in helping them implement and succeed in IIP projects. On the other hand, lower scores indicate that respondents have a poor or unpleasant perception of the role played by JAKOA.

Table 6
The Level of Orang Asli Perceptions toward the IIP

Orang Asli Perceptions	n	%	Mean	S.D.	Weighted Mean
1. Perceptions of Objectives in IIP			19.53	2.91	3.906
Low (5-11)					
Moderate (12-18)	34	(30.9)			
High (19-25)	76	(69.1)			
2. Perceptions of JAKOA's Role			20.62	2.62	4.124
Low (5-11)					
Moderate (12-18)	16	(14.5)			
High (19-25)	94	(85.5)			
3. Perceptions of Advantages in IIP			23.97	3.081	3.995
Low (6-14)					
Moderate (15-23)	44	(40.0)			
High (24-30)	66	(60.0)			

Note: The level for weighted mean (1.00-2.33 = low; 2.34-3.67 = moderate; 3.68-5.00 = high)

Next, the majority of respondents (60.0%) had a high-level perception of IIP advantages with a mean value of 23.97 (S.D.=3.08), followed by a moderate level (40.0%). A high score indicates that respondents looked at the advantages of IIP, while low scores indicated that respondents did not believe in the benefits of IIP. This study found that Indigenous participants in the project had the passion and desire to develop the project and succeed.

To determine which dimension is the most positive perceived by Orang Asli, an analysis of weighted mean values was used. Weighted mean was used due to the different number of items for each dimension (Khir et al., 2021). As shown in Table 6, the highest level is the perception of JAKOA's role (weighted mean= 4.124), followed by the perception of advantages in IIP (weighted mean=3.995) and perception of objectives in IIP (weighted mean=3.906). Overall, based on the weighted means, the level of all dimensions is high. As discussed, perception is important to influence the acceptance and adoption of technology innovation

Conclusion

The present study identifies the socioeconomic status and perceptions of Orang Asli participants in the Income Increment Program (IIP). The IIP is one of the government's programs intended to reduce the poverty level of the community through the aid of a maximum of RM10,000 according to the scope of the project, both individually and as a group. A total of 110 Orang Asli participants in the state of Perak, Malaysia involved in this study. Furthermore, the respondents' economic activities were more than money-making activities such as tapping rubber, collecting forests, doing business, and running oil palm farms, rather

than subsidised economic activities such as fishing, livestock hunting, and agriculture. The average monthly household income among respondents after joining IIP was RM929.54.

Overall, the majority of respondents had a high level of perception for all three dimensions namely perception of IIP's objectives, perception of JAKOA's role, and perception of IIP's advantages. These findings indicated that respondents have a good view of IIP, in which they believe that IIP can reduce indigenous poverty rates, provide employment opportunities and further enhance their knowledge of participating in IIP. In addition, the majority of the respondents also agreed that the IIP offers many benefits to the Indigenous people in terms of assistance, knowledge, experience gained, and guidance from relevant agencies especially in agriculture. They also have a good perception of JAKOA which is always encouraging the Orang Asli and monitoring IIP projects continuously.

Thus, this finding illustrates a positive sign that the Orang Asli is nowadays exposed to innovation and involved in development projects along with the mainstream community. In fact, they also believe and believe that IIP is a worthy effort to change their lives. Good acceptance of IIP is one of the key indicators that in turn will impact participants' participation in the program in the long term. Future recommendation recommends that current agricultural extensions such as IIP capture the significant fundamentals of the innovation systems perspectives. The current IIP should focus on innovation systems approaches to develop new technologies for smallholders that help the growth of crop yields and complete household food security for example. Hence, IIP and other extension programs need to establish research extensions with farmer linkages. Furthermore, a network of actors including input suppliers and marketing services is important to transform subsistence agriculture into a business and market-oriented agriculture. However, responsible party like JAKOA needs to play a vital part in continually providing encouragement and support to Orang Asli to ensure their motivation and accepting innovation as well as to improve their socioeconomic status and quality of life.

References

Al-Mamun, A., Mazumder, M. N. H., & Malarvizhi, C. A. (2014). Measuring the effect of Amanah Ikhtiar Malaysia's microcredit programme on economic vulnerability among hardcore poor households. Progress in Development Studies, 14(1), 49-59.

Al-Mamun, A., & Mazumder, M. N. H. (2015). Impact of microcredit on income, poverty, and economic vulnerability in Peninsular Malaysia. Development in practice, 25(3), 333-346.

Al-Shami, S. S. A., Majid, I., Mohamad, M. R., & Rashid, N. (2017). Household welfare and women empowerment through microcredit financing: Evidence from Malaysia microcredit. Journal of Human Behavior in the Social Environment, DOI:10.1080/10911359.2017.1345341

Bergfjord, O. J. (2009). Risk perception and risk management in Norwegian aquaculture. *Journal of Risk Research*, *12*(1), 91-104.

Borges, J. A. R., & Machado, J. A. D. (2012). Risks and risk management mechanisms: An analysis of the perceptions of producers of agricultural commodities. *Interdisciplinary Journal of Research in Business*, *2*(5), 27-39.

Chan, S. H., & Abdul Ghani, M. (2011). The impact of microloans in vulnerable remote areas: Evidence from Malaysia. *Asia Pacific Business Review*, *17*(01), 45-66.

Charatsari, C., Lioutas, E. D., & Koutsouris, A. (2017). Farmers' motivational orientation toward participation in competence development projects: A self-determination theory perspective. *The Journal of Agricultural Education and Extension*, *23*(2), 105-120.

Flaten, O., Lien, G., Koesling, M., Valle, P. S., and Ebbesvik, M. (2005). Comparing risk perceptions and risk management in organic and conventional dairy farming: Empirical results from Norway. *Livestock Production Science*, *95*: 11–25.

Hall, D. C., Knight, T. O., Coble, K. H., Baquet, A. E., & Patrick, G. F. (2003). Analysis of beef producers' risk management perceptions and desire for further risk management education. *Applied Economic Perspectives and Policy*, *25*(2), 430-448.

Hamid, H., Samah, A. A., & Man, N. (2013). The level of perceptions toward agriculture land development programme among Orang Asli in Pahang, Malaysia. *Asian Social Science*, *9*(10), 151.

Hardaker, J. B., Lien, G., Anderson, J. R., & Huirne, R. (2015). *Coping with risk in agriculture: Applied Decision Analysis*. (3rd Ed.). CABI Publishing.

Harun, R., Sulong, A., Wai, Y. H., Ismail, T. H., Yusoff, M. K., Manaf, L. A., & Juahir, H. (2010). Impacts of forest changes on indigenous people livelihood in Pekan District, Pahang. *Environment Asia*, *3*, 56-159.

Hassan, M. S., & Ibrahim, K. (2015). Sustaining small entrepreneurs through a microcredit program in Penang, Malaysia: A case study. *Journal of Human Behavior in the Social Environment*, *25*(3), 182-191.

JAKOA. (2011). *Pelan Strategik Komuniti Orang Asli: 2011-2015.* Bahagian Perancangan dan Penyelidikan Jabatan Kemajuan Orang Asli.

JAKOA. (2020). Unit Data, Bahagian Perancangan dan Penyelidikan (JAKOA). https://jakoa.gov.my/direktori-kakitangan-2/

Kabir, M. I., Rahman, M. B., Smith, W., Lusha, M. A. F., Azim, S., & Milton, A. H. (2016). Knowledge and perception about climate change and human health: findings from a baseline survey among vulnerable communities in Bangladesh. *BMC Public Health*, *16*, 266 (2016). https://doi.org/10.1186/s12889-016-2930-3

Khir, A. M., Ahmad, N., Samah, A. A., Hamsan, H. H., & Hamid, CW. A. CW S.B. (2018). Kajian Preliminari Status Sosioekonomi dan Persepsi Peserta Orang Asli terhadap Program Peningkatan Pendapatan. In Wan Ahmad Amir Zal, Nurhanan, Mohd Kamil, & Khairul Azhar (Eds.). *Proceeding International Conference on Poverty and Sustainable Society 2018 (ICOPSS 2018*) (pp. 286-294). Penerbit Universiti Malaysia Kelantan.

Khir, A. M., Ahmad, N., Azizul, M. D. A., Samah, A. A., & Hamsan, H. H. (2021). The Impact of Income Increment Program toward Socioeconomic Changes of Orang Asli in Perak, Malaysia. *International Journal of Academic Research in Business and Social Sciences, 11*(12), 2084–2105.

Kiama, T. N., Lindahl, J. F., Sirma, A. J., Senerwa, D. M., Waithanji, E. M., Ochungo, P. A., & Grace, D. (2016). Kenya dairy farmer perception of moulds and mycotoxins and implications for exposure to aflatoxins: A gendered analysis. *African Journal of Food, Agriculture, Nutrition and Development*, *16*(3), 11106-11125.

Koentjaraningrat. (2010). Manusia dan kebudayaan di Indonesia. *Djambatan*.

Kotler, P. (2000). *Marketing management: Analysis, planning, implementation, and control.* (9th Ed.). Prentice Hall International.

Kisaka-Lwayo, M., & Obi, A. (2012). Risk perceptions and management strategies by smallholder farmers in KwaZulu-Natal Province, South Africa. *International Journal of Agricultural Management 1*, 28-39.

Legesse, B., and Drake, L. (2005). Determinants of smallholder farmers' perceptions of risk in the eastern highlands of Ethiopia. *Journal of Risk Research 8*(5): 383–416.

Lewerin, S. S., Osterberg, J., Alenius, S., Elvander, M., Fellstrom, C., Traven, M., Wallgren, P., Waller, K. P., & Jacobson, M. (2015). Risk assessment as a tool for improving external biosecurity at farm level. *BMC Veterinary Research*, *11*,171 (2015). https://doi.org/10.1186/s12917-015-0477-7

Lim, H. (1997). *Orang Asli, forest and development* (No. 43). Forest Research Institute Malaysia.

Lindesmith, A. R., & Strauss, A. L. (1956). *Social psychology*. Holt Rinehart and Winston.

Lindsay, P. H., & Norman, D. A. (2013). *Human information processing: An introduction to psychology*. Academic Press.

Mankad, A. (2016). Psychological influences on biosecurity control and farmer decision-making. A review. *Agronomy for sustainable development*, *36*(2), 1-14.

Khir, M. A., Ahmad, N., Azizul, M. D. A., Abu Samah, A., & Hamsan, H. H. (2019). Sikap Terhadap Program Peningkatan Pendapatan dan Perubahan kepada Sosio-Ekonomi Peserta Orang Asli. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, *4*(6), 11-21. https://doi.org/https://doi.org/10.47405/mjssh.v4i6.264.

Morera, M. C., Monaghan, P. F., Tovar-Aguilar, J. A., Galindo-Gonzalez, S., Roka, F. M., & Asuaje, C. (2014). Improving health and safety conditions in agriculture through professional training of Florida farm labor supervisors. *Journal of agromedicine*, *19*(2), 117- 122.

Nmadu, J. N., Eze, G. P., & Jirgi, A. J. (2012). Determinants of risk status of small-scale farmers in Niger State, Nigeria. *Journal of Economics, Management, and Trade*, 92-108.

Ochieng, J., Kirimi, L., & Makau, J. (2017). Adapting to climate variability and change in rural Kenya: Farmer perceptions, strategies, and climate trends. In *Natural resources forum* (Vol. 41, No. 4, pp. 195-208). Blackwell Publishing Ltd.

Rogers, E. M. (2003). *Diffusion of innovations.* (5th Ed.). Free Press.

Ryan, R. M., Huta, V., & Deci, E. L. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies*, *9*(1), 139-170.

Samer, S., Majid, I., Rizal, S., Muhamad, M., Halim, S., and Rashid, N. (2015). The impact of microfinance on poverty reduction: empirical evidence from Malaysian perspective. *Procedia-Social and Behavioural Sciences*, Vol. 195, pp. 721-728.

Tzouramani, I., Alexopoulos, G., Kostianis, G., & Kazakopoulos, L. (2014). Exploring risk management strategies for organic farmers: A Greek case study. *Renewable Agriculture and Food Systems*, *29*(2), 167-175.

Uddin, E., Gao, Q., & Mamun-Ur-Rashid, M. D. (2016). Crop farmers' willingness to pay for agricultural extension services in Bangladesh: Cases of selected villages in two important agro-ecological zones. *The Journal of Agricultural Education and Extension*, *22*(1), 43-60.

Ullah, R., Shivakoti, G. P., & Ali, G. (2015). Factors effecting farmers' risk attitude and risk perceptions: The case of Khyber Pakhtunkhwa, Pakistan. *International Journal of Disaster Risk Reduction*, *13*, 151-157.

Waage, J. K., & Mumford, J. D. (2008). Agricultural biosecurity. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *363*(1492), 863-876.

Wheeler, T., & Von Braun, J. (2013). Climate change impacts on global food security. *Science*, *341*(6145), 508-513.

Woods, B. A., Nielsen, H. O., Pedersen, A. B., & Kristofersson, D. (2017). Farmers' perceptions of climate change and their likely responses in Danish agriculture. *Land use policy*, *65*, 109-120.

Zeweld W., Van Huylenbroeck G., Tesfay G., & Speelman S. (2017). Smallholder farmers' behavioural intentions towards sustainable agricultural practices. *J Environ Manage. 187*:71-81. doi: 10.1016/j.jenvman.2016.11.014. Epub 2016 Nov 21. PMID: 27883941.