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To cite this article: E Widiyanti et al 2018 IOP Conf. Ser.: Earth Environ. Sci. 200 012060

View the article online for updates and enhancements.
Young generation’s perception on the agricultural sector

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Abstract. The future agricultural sector is required not only to maximize the management of natural resources but also to manage human resources as the main actors driving and maintaining its existence amid the decreasing interest of the young generation in the agricultural sector. The agricultural sector is prone to high uncertainty due to global climate change. This research sought to identify young generation’s perception on the agricultural sector. This study was a descriptive research using survey on 120 farmers’ children (called as Taruna Tantri) in Sragen Regency, Indonesia with direct interview through questionnaires as primary data. The results showed that most youths had fairly good perceptions in terms of income, social status, and work convenience in the agricultural sector, but not in terms of career development and warranty of future life. The youth concerned with the lack of careers and warranty of future life if they work in the agricultural sector. However, today’s young generations are very potential to be prepared for being the human resources to develop agricultural development in the future. Therefore, some efforts are needed to encourage the youths to work in the agricultural sector through socializing and educating them about agriculture and introducing technology and cultivation innovations to anticipate the impacts of climate change on the agricultural sector.

1. Introduction
Indonesia has the potential to become a prosperous modern country with all of its potentials and abundant resources. Environmental agriculture can improve the quality of rural life, discourage urbanization and stimulate farming. This goal is associated with employment. Improving rural employment is a nation’s best interest because it increases national agricultural capacity, curbs migration to cities and generally improves quality of life [1]. However, such a great goal cannot be achieved without the adequate support of human resources, both quantitatively and qualitatively [2]. The current condition of human resources in the agricultural sector, becoming a threat against the improvement of agricultural sector performance in the future, is the young generation’s low interest in and motivation to work in the agricultural sector. The data of Badan Pusat Statistik (Central Bureau of Statistics/BPS) shows that the number of farmers aged more than 60 years reaches 3.4 million people or 15% of 22.3 million farmers in Indonesia, while the number of farmers aged 15-19 years is about 5.3 million people or 24% [3]. The agricultural reliance on food production and food security at
domestic, regional and global level depends on the youth productive force. It is this generation that is expected to rise in the coming years for food production and food security [4].

Youths’ interest in the agricultural sector is decreasing over years. Furthermore, 35 percent of those working in the agricultural sector has a low productivity, and most of them are small-scale farmers and the elderly [5]. Besides, there is a phenomenon of young to farm even when land is available people’s reluctance in many countries [6].

Climate change has raised serious concerns for developing countries to face tremendous social, environmental and economic impacts. Climate change could reduce crop yield and areas vulnerable to drought could become marginal for cultivation. The increase in air and water temperatures will reduce plant efficiency and power output, leading to major economic costs [7]. Climate change is expected to result in long-term water and other resource shortages, worsening soil conditions, drought and desertification, disease and pest outbreaks on crops and livestock, sea-level rise, and soon. Vulnerable areas are expected to experience agricultural productivity losses, primarily due to the reduced crop yields [8]. Such condition threat leads the young generation to rethink of deciding on working in the agricultural sector. Climate change results in uncertainty and high risk in farming.

Youths are part of a farming family, but many rural parents in developing countries do not want their children to farm. Without parental support, it is not easy for young people to get involved in family farming [9]. A study on the young generations’ perception of agricultural work is needed to analyze whether the young generations have a positive or negative attitude toward working in the agricultural sector. This perception is assumed to be a determinant of the young generations’ willingness to work in the agricultural sector.

2. Materials and methods
This study was a descriptive research aiming to describe the characteristics of the young generations and their perceptions about working in the agricultural sector. The types of works in agricultural sector discussed in this study were all potential jobs related to agricultural sector both on the farm and off-farm, including, among others: providers of agricultural production facilities, cultivation, processing of agricultural commodities, marketing and provision of agricultural support facilities.

To analyze the Taruna Tani (farmers’ children)’s perception on the agricultural, perception approach (valuation) is applied to Taruna Tani in terms of income, job status, work convenience, career development opportunity and warranty of future life.

This research took place in Sragen regency because Sragen has the largest number of youth farmers in Central Java [10]. The data used in this research was primary data collected through interviews with questionnaire help. Interviews were conducted with 120 young farmers in Kedawung, Sidoharjo, and Sambung Macan sub-districts, using the following criteria: children of farmers, aged between 16-22 years, participating in assisting family farming activities, their life still depending on family/parents’ income, and have not determined yet the agricultural sector as their livelihood.

3. Result and discussion
The young generation’s perception of agricultural work is a form of positive (good) or negative (bad) assessment on working in the agricultural sector.

The results show that most of the young generations (55.83%) have a fairly good perception of income in the agricultural sector. The term fairly good income here means that the income received from the agricultural sector is only able to meet the primary needs (physiological needs) and secondary needs (education needs).

Most youths (50.83%) have a fairly good perception on the social status of working as farmers. This is due to their environment that views farming as a noble job. Farming means to contribute to providing food resources for the community. In addition, the structure of rural communities still sees farmers with the agricultural land like the ones having a fairly high social status.
Table 1. Young generations’ perceptions on the agricultural sector

| Perception                  | Very good | Good | Average | Bad | Very Bad |
|-----------------------------|-----------|------|---------|-----|----------|
| Num | %  | Num | %  | Num | %  | Num | %  | Num | %  |
| 1. Income                   | 13        | 10.83| 34     | 28.33| 67     | 55.83| 6    | 5.00| 0     | 0.00 |
| 2. Social status            | 8         | 6.67 | 44     | 36.67| 61     | 50.83| 7    | 5.83| 0     | 0.00 |
| 3. Work convenience         | 15        | 12.50| 46     | 38.33| 52     | 43.33| 7    | 5.83| 0     | 0.00 |
| 4. Carrier development      | 11        | 10.00| 19     | 16.5 | 46     | 38.5 | 44   | 35.0| 0     | 0.00 |
| 5. Warranty of future life  | 5         | 4.17 | 13     | 10.83| 51     | 42.50| 51   | 42.50| 0    | 0.00 |

Source: Primary Data Analysis, 2017

In relation to the young generations’ perceptions of social status and income, most youths (43.33%) also have a fairly good perception on the convenience of working in the agricultural sector. The work convenience intended by the young farmers here is the existence of facilities and infrastructure supporting the farming activities. The current conditions show that technology and mechanization in the agricultural field run very rapidly and highly need the young generations’ participation.

In terms of career development, some of the young generations (38.5%) consider that career development in the agricultural sector is quite good, but 35.0% of youth state that career development in agriculture sector is not good enough.

Many people think that being a farmer does not provide a warranty of future life for them. As farmers grow older and are no longer able to devote their energy to cultivate their land, they will cease to produce their source of food and income. This view or perception also occurs among the younger generations. Most youths (42.50%) consider that there is an adequate warranty of future life and 42.50% don’t think so (which viewed as bad), in working as farmers.

In general, the youths’ perception of the agricultural sector is quite good. Therefore, efforts are needed to find strategic measures that will encourage the youths’ positive or good consideration and the improvement of youths’ interest in the agricultural sector. Paisley [9] explains some efforts to encourage young people to be interested in agriculture: sharing the young professionals’ success stories in agriculture, optimizing the role of social media in spreading positive messages to global audiences as well as information about opportunities in this sector, working together and accepting new ideas and strategies from youths to improve the family farm productivity. The older generation must understand that young people can bring modern practices and tools to help modernize the agricultural business activities.

To encourage a positive impression on agriculture, Jieying [11] also emphasizes on the importance of advocacy networks, the appreciation and competition for youth in agricultural research and development, the setting up of success stories, the conferences and other channels that can be used to advocate modern agriculture.

In the Regulation of the Minister of Agriculture No. 07 of 2013, the directions for the development of the Young Generations of Agriculture should be directed to increase their potential and role in agricultural development to become a professional young agricultural entrepreneur [12].

4. Conclusion
The results of this study indicate good perception or appraisal on working in the agricultural sector, in terms of income, social status, comfort, career development and warranty of future life. However, to encourage more positive perceptions, some efforts are needed by young generations to love the agricultural sector and finally to be interested in working in the agricultural sector. Some of those efforts can be accomplished by empowering the Young Generations of Agriculture to become Young Farmers Entrepreneur through agribusiness optimization efforts, appreciating the role of youth in...
agricultural development, and approaching the young generation through local media such as youth forums and organizations, media (new media) in globalization and media digitization era expected to be efficient and effective to restore the optimism and interest in the agricultural sector among young generations. In addition, farmers should prepare an adaptation strategy to anticipate the loss due to climate change. The strategies that can be taken, among others: adjusting planting time, optimizing the absorption well, cultivation innovation, and performing a good financial management. Thus, the farming is expected to keep profitable and attract the young generation's interest in working in the agricultural sector.

Acknowledgment
Thank you to the Ministry of Research and Technology for the opportunity and for funding this research, and to the Food Security Agency of Sragen Regency for its support during this research.

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