## Why doing a PhD in development and agricultural economics?

Zhiyao (Yao) Ma

When I am sitting in my small-warm apartment with the sunlight penetrating the growing leaves into the louvre, surrounded by immense flat farms and barns in Davis, it is time to remind myself what brought me here to devote at least five years to exploring economic fields, especially Development and Agricultural Economics. In general, I believe that practice and knowledge should be a ceaseless cycle in our whole life. The argument made by John Kenneth Galbraith could summarize my feelings: the exoteric feature of applied economics, seeking a solution to and action on real-world problems, constantly intrigues me.

Firstly, I am inclined to statement that everything is changing and temporarily existing, but development is eternal. Because my parents are first-generation college students in their families going from rural to urban, they keep sending me to relatively poor areas, which makes me deeply understand what a real life of the masses is. In each vacation in my high school and college years, I was steeped in villages in a remote part of China, living and dining with rural residents. The overall rural development was evident through the presence of iPhones there, the transformation of roads from unsurfaced to asphalt, and even the level of fashionable clothes. However, despite the rapid improvement of life quality, income inequality is getting worse and worse, both geographically and structurally. Nowadays, the Chinese government directs their minds back to poverty issues and emphasizes the importance of fair allocation after 40 years of Open and Reform. By studying development economics, I am working on quantitively determining a good line between efficiency and fairness through an organic mechanism of regulation and markets to explore the way out of the "historical circle" that suffered generation by generation.

Secondly, in my mind, services, industry, and finance are undoubtedly influential to this world, but agriculture is fundamental. Growing up in a developing country, I admire the father of hybrid rice, Yuan Longping, just like other relatives. The most frequently telling stories from the last generation are all about food and starvation. The Chinese people have enough to eat for only around 30 years when my family chooses to drink milk on daily meals for only 15 years. However, the general material condition of the people in the world is still not sufficient while some groups of people are carelessly wasting food. How could we bear this inequality without thinking of a giant cake and sharper knife? Chairman Mao once claimed that the brighter future of Chinese agriculture is in mechanization. His statement is indeed true, whereas the geographical and sociological condition of China is complicated and multitudinous. Considering this fact and for the purpose of finding a better solution in agricultural allocation, I am eager to learn more about agriculture economics under the existence of a global commodity market.

More specifically, the topics like the pricing of agricultural products and the newly emerged conceptual commodities, such as carbon quota or water futures, keep me up at night. For example,

I would like to study the effectiveness of the "Insurance + Futures" mode, a new type of agricultural insurance that uses the derivative market for risk diversification against natural disasters, conducted in China and many South Asia countries. Also, the reaction of rural credit markets towards either implicit or explicit information disclosure from the central government is intriguing to me. Furthermore, suppose I get a chance to work with Professor Michael Carter. In that case, I desire to learn his updated view about the effect of liberalization of financial markets on small farms and discuss the applications of sociological findings in economic policies, including quantifications of the social-bonding credit score system in poverty alleviation projects.

All my interests and efforts in agricultural economics aim to find a better development model so that more people could enjoy at least the life and opportunities that I have. Hence, I claim that upto-date development models targeting poverty reduction by combining small agricultural industries and large-scale mechanized agriculture are imperative in academia. If possible, I will study whether those natural poverty-alleviation industries with high manpower added value, such as growing and processing fructus momordicae and chillies, can be combined with modern corporate equity-structure design and credit-system establishment to stimulate overall productivity and enhance the ability of farmers to bargain in the market. In addition, I am willing to expand the study of my MA thesis to the settings of other countries, which estimates the effects of the Land Coupon approach on spatial income inequalities, particularly the urban-rural income ratio, applying the newly developed MASC estimator combining the matching and synthetic control estimators through model averaging.

Based on my previous studies and experiences, I understand something about Chinese-style development and American ones. In contrast, I am eager to learn more about the rest of the world from our ARE program at Davis because the methodology of adopting measures to local conditions requires an enormous store of knowledge.

My unique upbringing helped me to become open to multiple perspectives. My father is a firm believer in liberalism, while my mother favours Marxism and Chinese traditions. Having parents with such different outlooks on life often caused trouble at home, and I frequently found myself play the role of peacemaker. While the heated discussions between them put some pressure on me as a child, they also allowed me to develop mediation and listening skills towards radical opinions both in life and in research. Like my family role, I would like to bridge two poles of societies, countries, and even ideologies through my tiny contribution to development studies.

All in all, I wish I would be a global-sighted, open-minded, and cross-field economist who focuses on development and agriculture and speaks for the poor after receiving the training from the fantastic ARE PhD program.