## Extended Abstract Please do not add your name or affiliation

Paper Title

Introduction

The struggle to intensify cocoa production in Ghana. Making a living from the forest

Abstract prepared for presentation at the 96<sup>th</sup> Annual Conference of the Agricultural Economics Society, K U Leuven, Belgium

4th - 6th April 2022

Abstract 200 words max

Can farmers in southern Ghana still make a living from growing cocoa?

Cocoa has long been a major income-earner for farmers in southern Ghana. In the past, converting forest to cocoa groves has generated a forest rent as farmers could cultivate cocoa semi-intensively and still achieve profitable yields. With the forest frontier closed, the technical challenges of soil fertility, weeds, pest, disease, and parasites have increased. Farmers need to master technical skills, access inputs, and invest more if they are make money from cocoa.

We examine these challenges for farmers in Western North Region of Ghana. The prime challenge facing most farmers is lack of capital to invest: they know what they should do on their cocoa farms, but lack funds to buy inputs or pay for labour. Some of the elderly farmers who can no longer work on their farms, and for farmers hit by misfortunes — such as illness and medical bills — fall into a poverty trap where they cannot work their way out of poverty.

Yet with capital, it is still possible to earn from cocoa — with implicit returns to domestic of US\$20 a day. But to achieve this, the absent market for credit has to be resolved. More technical guidance is needed as well. For the elderly and the unlucky, social protection is indicated.

JEL Code  Agricultural and Natural Resource Economics; Environmental and Ecological Economics 000	Keywords	Cocoa, livelihoods, Ghana
2001091041 2001011120 400	JEL Code	Agricultural and Natural Resource Economics; Environmental and Ecological Economics Q00
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Since cocoa began to be cultivated in the 1880s in southern Ghana, it has created jobs, incomes and prosperity for the many farmers growing the crop. Until recently, cocoa farmers could make use of highly

favourable conditions when clearing forests to plant cocoa. They needed to do little other than plant seedlings then wait to harvest the pods. When trees aged, or soil fertility declined, or swollen shoot virus disease attacked the trees, they could abandon the old groves and move to establish new stands of cocoa in virgin forests. Over the decades, the frontier for new cocoa farms moved west across the country.



100 - 250 words

By the 2000s, however, the last available forests in Western Region were being taken up and the frontier closed. With no new land available for cocoa, farmers would need to maintain and renew their groves to preserve their incomes, and to intensify production if they wanted to earn more from cocoa. At the same time, farmers faced increasing attacks from pests, fungi, parasites and the deadly threat of swollen shoot — while their trees aged and needed replanting.

This paper has two aims:

- to set out the challenges, technical and economic facing the farmers of Western North Region in the late 2010s, their perceptions and responses to them; and,
- to assess the implications for the continued growth of cocoa growing in the Region and for the future livelihoods of cocoa growers.

Methodology 100 – 250 words

In late 2019, we collected data from five villages in Juaboso District. For qualitative insights into cocoa farming and livelihoods, we interviewed 54 farmers, five cocoa labourers, two chiefs, four cocoa purchasing clerks, and two cocoa extension officers. Nine focus groups of cocoa farmers, differentiated by men and women, adults and youth, were held. The life histories of fourteen senior farmers, five women and nine men, were compiled.

We surveyed 276 farmers to gather quantitative data about cocoa farming.

To establish local history we also reviewed the literature.

Using previous literature and understandings to identify key themes for cocoa farmers — access to land and labour, capital, public services, technology and marketing of cocoa — we assessed the quantitative and qualitative data to develop a narrative about the state of cocoa farming, the challenges faced, and the issues arising for public policy.

Results | 100 – 250 words

Technical challenges of cocoa farming dominated farmers' accounts. For many problems they faced, solutions are known — although when it comes to chemical control of pests and fungi, questions arise over the environmental consequences of the heavy and repeated use of chemicals. The main exception appeared to be swollen shoot viral disease for which the remedy of destroying affected trees, sterilising the soil, and replanting (preferably with resistant stock) was costly and even then, there was no guarantee the disease would not return.

Farmers, however, struggled to meet these challenges, even those for which remedies existed. To some extent this was for lack of technical knowledge, including the ability to discriminate among the profusion of chemicals on offer in markets, some of them of dubious quality. More important, many farmers were chronically short of capital to pay for inputs and labour when needed. In the past, cocoa farmers had few other demands on their cash incomes, but by the late 2010s school and education fees, medical bills, etc., pre-empted funds for farming. Formal and informal credit was scarce. Many farmers thus under-invested in their cocoa, weeding less than needed, spraying less frequently, leaving mistletoe uncut, accepting that they would harvest fewer pods as a result.



Some farmers were especially unfortunate: those hit by accidents and ill health — with costly bills to pay, those too old to work on their farms. Their farms might then be partly abandoned with pitiful yields, if any at all. They faced a poverty trap.

## **Discussion and Conclusion**

100 - 250 words

It is still possible to making a living from cocoa. Indeed, a well-managed cocoa farm where working capital was available to pay for inputs and labour, might generate returns equivalent to US\$20 for every day worked on the farm. But for most farmers to realise this, two things would be necessary. One, the farmers need better advice on technical responses to the challenges they face. More spending on extension may well have a high return. Two, farmers need more access to working capital. This should be possible, through value chain arrangements — it should be possible to inject finance through the buyers to the growers, growers who have to sell to buyers and can then repay advances.

Our study also revealed the travails of older farmers who can no longer work, and of those who suffer from ill health and accidents. They have little support, but their suffering calls for remedy. Some form of social protection — mutual funds, insurance, pensions (perhaps funded by a levy on cocoa sales) — could make a difference.

If progress can be made towards overcoming these challenges, the future of cocoa can be as bright as it has been so often in the past.

