

Contract farming improves incomes for better-off farmers



The evidence suggests that contract farming arrangements need to offer clear incentives to farmers in order to survive over time.

What is the aim of this review?

This Campbell systematic review examines the impact of contract farming on income and food security of smallholder farmers in low- and middle-income countries. The review summarises findings from 75 reports, of which 22 (covering 26 contract farming interventions) were used for meta-analysis.

Contract farming, a sales arrangement between a farmer and a firm, is popular with government and donors. Contract farming can produce substantial income gains for farmers. Moreover, these benefits may well be required for contract farming schemes to survive. Better-off farmers are most likely to participate in contract farming schemes.

What did the review study?

Contract farming is a sales arrangement agreed before production begins, which provides the farmer with resources or services. The service package provided by the firm varies per location, and can include transport, certification, input provisioning and credit.

This systematic review summarises evidence on income effects for smallholders to assess average effects and explore combinations of factors that increase these effects.

What studies are included?

Included studies had to examine the impact of contract farming on income and food security of smallholder farmers in low- and middle-income countries. Studies had to use a comparison group with appropriate statistical methods to allow for selection effects.

Seventy-five studies were identified with quantitative estimates of the impact of contract farming of which 22 studies, covering 7,471 respondents, were of sufficient rigour to include in the meta-analysis of income effects. The meta-analysis covers 26 empirical instances of contract farming in 13 developing countries.

What are the main results in this review?

Contract farming may substantially increase farmer income with an average effect in the range of 23 to 54 per cent. There is upward bias in the estimate because of survivor bias in individual studies (no data on farmers who drop



How up-to-date is this review?

The review authors searched for studies published up to October 2015. This Campbell Systematic Review was published in December 2017.

What is the Campbell Collaboration?

The Campbell Collaboration is an international, voluntary, non-profit research network that publishes systematic reviews. We summarise and evaluate the quality of evidence about programmes in the social and behavioural sciences. Our aim is to help people make better choices and better policy decisions.

About this summary

This summary was prepared by Howard White (Campbell Collaboration) based on the Campbell Systematic Review 2017:13 The effectiveness of contract farming for raising income of smallholder farmers in low- and middle-income countries: a systematic review by Giel Ton, Sam Desiere, Wytse Vellema, Sophia Weituschat and Marijke D'Haese (DOI 10.4073/ csr.2017:13). The summary was redesigned and edited by Tanya Kristiansen (Campbell Collaboration). Financial support from the American Institutes for Research for the production of this summary is gratefully acknowledged.



out of schemes) and in the body of evidence (no studies on contract farming arrangements that collapsed in their initial years), and publication bias in the literature (under-reporting of insignificant outcomes). Therefore, some caution is needed in interpreting the findings.

For farmers to give up their autonomy in marketing and prevent side-selling, substantial income gains need to be offered. This is especially so for annual crops and when firms have contracts directly with farmers rather than through a cooperative.

Poorer farmers are not usually part of contract farming schemes. In 61% of the cases, contract farmers had significantly larger landholdings or more assets than the average farmers in the region.

What do the findings in this review mean?

Contract farming covers a wide range of contractual arrangements. This heterogeneity makes it difficult to draw general conclusions from the literature published on this topic. The lack of studies on 'failed treatments' leads to an overestimation of the effectiveness of contract farming.

Moreover, the analysis suggests a marked publication bias; all studies report on at least one case of contract farming that has a positive and statistically significant income effect.

Relatively larger or richer farmers can cope better with these risks and are, therefore, more likely to take part in a contractual arrangement. This implies that contract farming is more suited to the relatively better-off segment of the farming population.

Further research should: (1) improve reporting of the intervention; (2) document the less-successful instances of contract farming, and report inconclusive results (insignificant effects); and (3) capture other outcomes of contract farming such as (sector-wide) innovation, and livelihood resilience.