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Agricultural commodity value chains: The effects of market concentration on farmers and producing countries – the case of cocoa

Note by the UNCTAD secretariat

Executive summary

This note discusses market concentration and the distribution of value among stakeholders in agricultural commodity global value chains. Specifically, the note examines the structure of the cocoa industry, in which the already weak position of dispersed, smallholding farmers in global value chains continues to be undermined by other well-integrated stakeholders, including traders, processors and manufacturers of cocoa and chocolate products. This structure, which prevails across most agricultural commodity value chains worldwide, leaves limited room for farmers to increase revenues to cover production costs and provide them with a margin for a decent livelihood, and this may undermine the sustainability of farming businesses unless concerted actions are taken to address the situation. This note highlights some policy options for supporting small-scale stakeholders in agricultural commodity global value chains, especially farmers, in the face of increasing concentration in all segments of such chains.

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I. Introduction

1. Concentration at all stages along agricultural commodity value chains – including horizontal concentration and vertical integration – has become a topical issue in recent years.[1] A limited number of large companies control a large part of the markets, from trading to the processing and retailing of agricultural products. For example, in 2002, two companies controlled nearly 50 per cent of the global banana trade and two others handled three quarters of the global grain trade.[2] In 2008, it was estimated that, globally, 45 per cent of coffee processing was carried out by the four largest companies in the industry and 80 per cent of tea markets were controlled by only three companies.[3] In 2012, it was estimated that four transnational corporations controlled 90 per cent of the global grain trade.[4] In the same period, the leading four players in cocoa markets in Côte d'Ivoire, Ghana and Nigeria bought more than half of the cocoa beans produced in these countries.[5]

2. The rationale behind concentration patterns in agricultural commodity value chains is the corporate objective of attaining economies of scale, amid increasing globalization of food chains. The resulting market structure could effectively contribute to achieving a better allocation of resources while improving efficiency in global value chains of agricultural products, with the ensuing benefits passed onto all stakeholders along the value chains. Other reasons for concentration include the need for companies to have strict control over the quality required by customers, and the high investment costs in agribusiness led by elevated sunk and marketing costs that limit new entrants or squeeze small firms out of markets. Concentration patterns may also be explained, in part, by the fact that concentration at one stage of a value chain (for example, processing) may have the same effect at other stages (for example, manufacturing or trading). This permits the balancing of bargaining power along value chains.[6]

3. However, while global value chains of agricultural products are increasingly being concentrated, farmers – the mainstay of agrifood production worldwide, who operate at small-scale levels – remain dispersed and thus unable to wield countervailing power against well-consolidated buyers and processors. This situation raises concerns about the state of integration of such farmers into value chains at a time when trade liberalizing reforms have increased their exposure to markets. Market concentration may become problematic, especially if it fosters monopolistic trends along value chains. Such behaviour increases the bargaining power of large players to the detriment of small players, including smallholding farmers and small firms. Such a market structure tends to reduce the profits of the latter, as well as the share of value added captured in producing countries. Concentration in wheat, rice and sugar value chains, for instance, has led to the market power of international

[1] Horizontal concentration means that a few companies dominate a given segment of a value chain. Vertical integration or concentration (the expressions may be used interchangeably) means that the same company or a limited number of companies dominates more than one segment of a value chain.

[2] South Centre and ActionAid, 2008, *Commodity Dependence and Development – Suggestions to Tackle the Commodities Problems* (Geneva).

[3] World Bank, 2007, *World Development Report 2008: Agriculture for Development* (Washington, D.C.).

[4] S Murphy, D Burch and J Clapp, 2012, Cereal secrets – the world's largest grain traders and global agriculture, Oxfam Research Reports.

[5] Ecobank, 2012, Structure and competition in West Africa's cocoa trade, Presentation, 21 November, available at http://www.ecobank.com/rc_presentations.aspx (accessed 27 June 2016).

[6] J Humphrey and O Memedovic, 2006, *Global Value Chains in the Agrifood Sector* (Vienna, United Nations Industrial Development Organization).

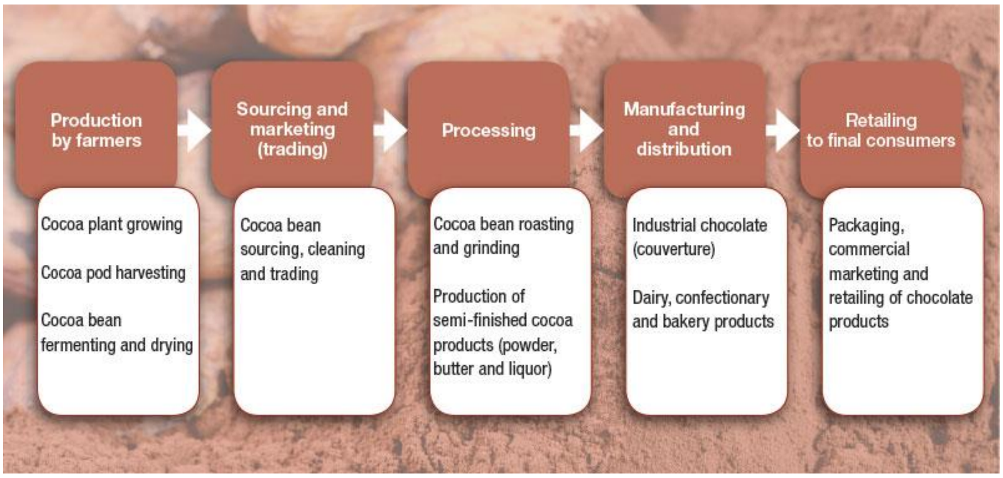
trading companies that, in turn, has contributed to widening the spread between global and domestic prices for these products.[7]

4. This note draws on a recent UNCTAD analytical study[8] and illustrates concentration issues in the cocoa sector. It examines horizontal concentration and vertical integration in the cocoa industry and discusses their potential impacts on stakeholders along the cocoa global value chain. Chapter II examines the current structure of the industry, chapter III analyses the potential impact of this structure on various stakeholders, chapter IV discusses some policy recommendations based on the discussion and chapter V draws conclusions.

II. Global cocoa industry: Market structure and concentration

5. The cocoa global value chain (also referred to as the cocoa-chocolate global value chain) has five major segments, namely, production; sourcing and marketing; processing; manufacturing and distribution; and retailing to final consumers. A simplified overview of the chain is illustrated in figure 1.

Figure 1
Overview of the cocoa global value chain from farmers to consumers



6. In almost all of the cocoa value chain segments, increasing horizontal concentration and vertical integration may be observed, as discussed in this chapter. The market structure in the global cocoa industry is the result of a number of merger and acquisition deals, some of which are detailed in box 1.

Box 1
Selected major merger and acquisition deals in the cocoa industry since 2010

In 2010, the United States of America-based company Kraft Foods (renamed Mondelez International in 2012) took control of Cadbury, a confectionary-related transnational corporation based in the United Kingdom of Great Britain and Northern Ireland.

In 2011, Nestlé of Switzerland purchased Dongguan Hsu Fu Chi Food, an important player in China’s confectionery market, thereby strengthening Nestlé’s presence in China.

In 2013, Barry Callebaut of Switzerland extended its businesses by purchasing the cocoa

[7] World Bank, 2007.

[8] UNCTAD, 2016, *Cocoa Industry: Integrating Small Farmers into the Global Value Chain* (New York and Geneva, United Nations publication).

ingredients division of Petra Foods of Singapore, making it the world's largest and most vertically integrated player along the cocoa value chain.

In 2014, Ecom Agroindustrial of Switzerland, a global commodity trading and processing company focusing on coffee, cotton and cocoa, bought the commodity trading branch of Armajaro of the United Kingdom. The acquisition deal was approved by the European Commission in May 2014.

In September 2014, in the United States, Archer Daniels Midland announced an agreement to sell its global chocolate business to Cargill. The European Commission approved the proposed deal in July 2015 on the condition that Cargill divest Archer Daniels Midland's largest industrial chocolate plant in Europe (in Mannheim, Germany) to a competitor in order to keep the global chocolate market competitive.

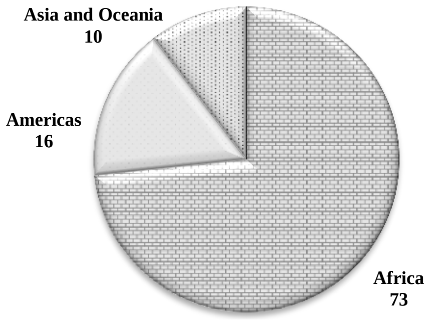
In December 2014, Olam International of Singapore reached an agreement with Archer Daniels Midland to buy the latter's global cocoa business. The deal was approved by the European Commission in June 2015.

Source: UNCTAD, 2016.

A. Horizontal concentration

7. The first segment of the cocoa value chain, production, is handled by a few producing countries. At the global level, Africa remains the largest cocoa-producing region. It is estimated that in the 2013–2014 crop year, the continent produced roughly 3.2 million tons of cocoa beans, representing 73 per cent of global production (figure 2). In the same period, about 60 per cent of global production was handled by the two leading producing countries, Côte d'Ivoire and Ghana. Cocoa supply may thus be considered highly concentrated in a limited number of countries. However, cocoa is typically produced by a number of dispersed small-scale growers; an estimated 5 million to 6 million farmers globally.[9] In Côte d'Ivoire, for example, 80–85 per cent of cocoa is produced by individual farmers who are not members of any cooperative or organization.[10]

Figure 2
Production of cocoa beans by region, 2013–2014 crop year
(Percentage)



Note: Numbers do not total 100 due to rounding.

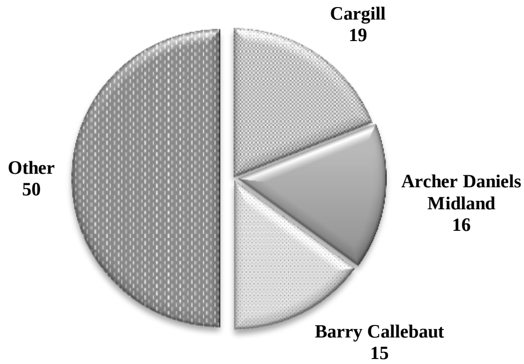
Source: UNCTAD secretariat calculations based on International Cocoa Organization, 2015, *Quarterly Bulletin of Cocoa Statistics: XLI(2) – Cocoa Year 2014–2015* (London).

[9] World Cocoa Foundation, 2012, Cocoa market update, March, available at http://worldcocoafoundation.org/wp-content/uploads/Cocoa-Market-Update-as-of-3.20.2012.pdf (accessed 27 June 2016).

[10] International Labour Rights Forum, 2014, *The Fairness Gap* (Washington, D.C.).

8. Cocoa trading is also characterized by market concentration, although this is not necessarily a new development. From 1980 to the early 2000s, for example, the number of cocoa trading houses in London decreased threefold, from 30 to less than 10 players.[11] The concentration pattern has accelerated in recent years due to several mergers and acquisitions. As a result, it is estimated that in 2013, the three largest cocoa trading and processing companies − Barry Callebaut, Cargill and Archer Daniels Midland − traded 50–60 per cent of the world's cocoa production.[12] At the national level, marketing channels for cocoa beans are also controlled by a limited number of players. For example, in Côte d'Ivoire, three international companies, through local agencies, bought about 50 per cent of the cocoa produced in the country in the 2011–2012 crop year (figure 3).

Figure 3
Côte d'Ivoire: Leading companies in cocoa purchases by volume, 2011–2012 crop year
(Percentage)



Source: UNCTAD secretariat calculations based on Ecobank, 2012.

9. A major cause of the consolidation pattern in the trading segment of the cocoa value chain is trade liberalizing reforms. Liberalization in producing countries was expected, among other objectives, to increase competition in domestic intermediation and in the export of cocoa beans by increasing the number of players. However, high operating costs, including transport costs, have contributed to strengthening the position of transnational corporations, which have better access than small-scale traders and buyers to resources (finance and technology). As a result, most small players have been squeezed out of cocoa marketing channels or have merged with transnational corporations that took control of their activities.[13] This has resulted in the dominant position of a limited number of companies with larger market shares in cocoa-producing countries.

10. With regard to processing, origin grindings (grinding operations taking place in cocoa-producing countries) have improved in recent years (box 2). A limited number of transnational corporations dominate the markets. In 2006, four large companies, namely Barry Callebaut, Cargill, Archer Daniels Midland and Blommer Chocolate Company, controlled about 50 per cent of the global cocoa grindings capacity, and this share increased to 61 per cent in 2015 (figure 4).[14]

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[11] TD/B/COM.1/EM.10/2.

[12] UNCTAD secretariat calculations based on *Reuters*, 2013, Cargill on verge of buying Archer Daniels Midland cocoa unit, 2 October.

[13] See for example CL Gilbert, 2009, Cocoa market liberalization in retrospect, *Review of Business and Economics*, 54(3):294−312.

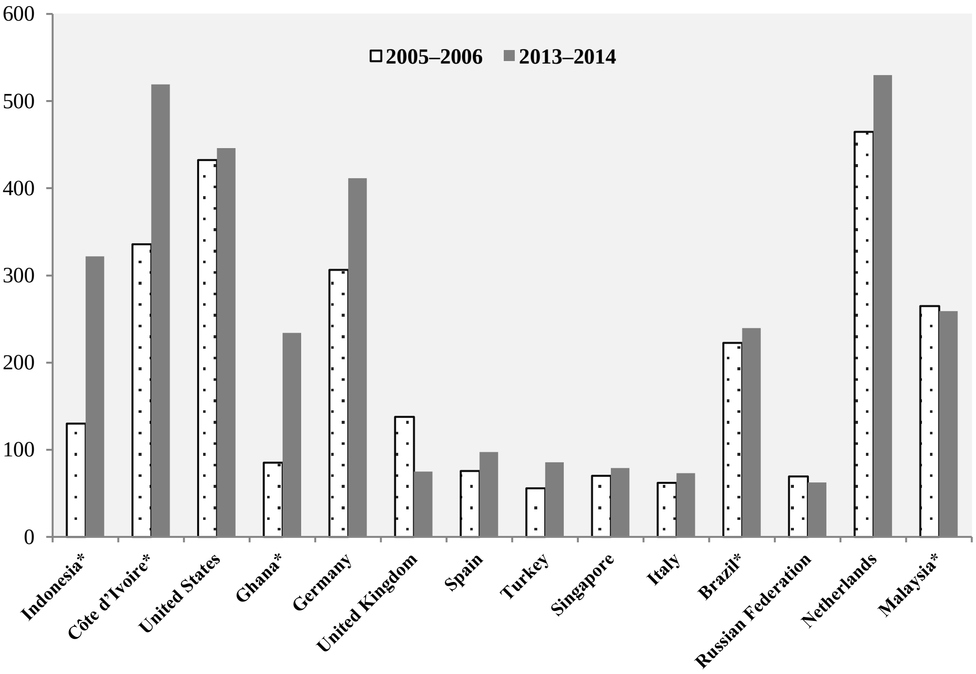
[14] UNCTAD, 2008, *Cocoa Study: Industry Structures and Competition* (Geneva, United Nations publication).

Box 2

Internalizing agrifood processing in producing countries: Evidence from grindings

Historically, cocoa beans have been ground in traditionally importing countries in Europe and North America, where cocoa processing companies have been able to meet the requirements of chocolate manufacturers with regard to quality, timely delivery and cost effectiveness. Today, however, the first stages of processing in a significant proportion of cocoa bean production are undertaken in producing countries, due to government incentives and investments by national and transnational corporations. For example, origin grindings of cocoa in Côte d’Ivoire increased by 40 per cent from 2005–2006 to 519,400 tons in 2013–2014 (crop years). Similar significant increases have taken place in other producing countries such as Ghana and Indonesia (figure). Furthermore, the development of local and regional markets for chocolate products in cocoa-growing areas in Africa and Asia offers investment opportunities for manufacturers, which contributes to retaining greater value added in these regions. For example, in 2015, Cémoi Group of France established the first industrial-scale chocolate factory in Côte d’Ivoire with the objective of stimulating and supporting growing West African markets for chocolate products.

Grinding of cocoa beans in major producing and importing countries (Thousands of tons)

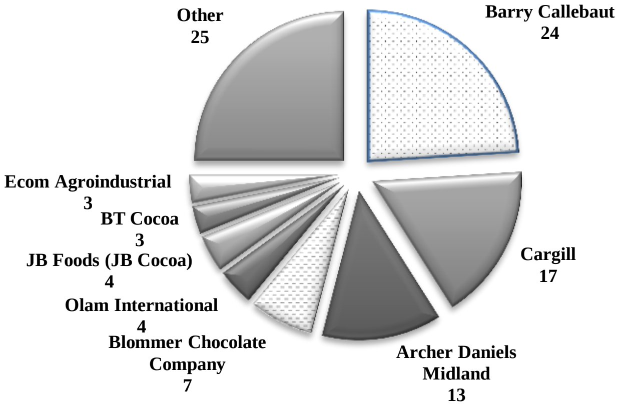


* Cocoa-producing countries

Such developments represent a somewhat upward movement along the value chain by cocoa-producing countries, and have contributed to boosting some value added in cocoa-growing regions. However, the extent to which origin grindings truly benefit producing countries is debatable for two major reasons. First, origin processing is mostly undertaken by transnational corporations with, often, low involvement by local companies (for example, in 2014, the leading five grinders in Côte d’Ivoire were transnational corporations or their local subsidiaries, accounting for nearly 85 per cent of the country’s cocoa grinding capacity). Consequently, much of the value created is captured by foreign investors. Second, as that cocoa processing is capital intensive, the extent of employment it generates in producing countries may be debatable.

Source: UNCTAD, 2016.

Figure 4
Grinding capacity in the cocoa-processing industry as a share of total grindings, 2015
(Percentage)



Note: With the acquisition of the Archer Daniels Midland cocoa-processing business by Olam International in 2015, at present, four processing companies control nearly two thirds of the global cocoa grindings capacity.

Source: UNCTAD, 2016.

11. Concentration in cocoa processing has been driven in recent years primarily by the recent boom in commodity prices. High prices of inputs, including cocoa beans and energy, have increased production costs for processing companies, resulting in narrower margins for most.[15] Merger and acquisition strategies in the segment have therefore been used by existing players as a means of increasing cost efficiency and attaining greater economies of scale. This is particularly true for cocoa processors, who compete primarily on costs. Moreover, cocoa processing is capital intensive, with high sunk costs, and this may have discouraged potential new entrants.

12. In the chocolate retailing segment of the cocoa value chain, a limited number of confectionery and branded companies lead the markets. In 2013, for example, the total sales of chocolate bars and other candies by the leading 10 companies amounted to 42 per cent of global confectionary sales, estimated at $196.6 billion. Chocolate products sold through modern grocery retail channels, including hypermarkets and supermarkets, accounted for 56 per cent of total global sales.[16] Some chocolate manufacturers are now opening their own branded retail stores, which has led to increased brand exposure and image improvements and has, in turn, enhanced their share of value along the cocoa value chain. At the national level, retail markets are also dominated by a few companies. For example, in France, the main chocolate confectionery companies in 2014 were Ferrero (19 per cent of the market), Lindt and Sprüngli (13 per cent) and Nestlé and Mondelez (11 per cent each).[17] In the United States, the chocolate confectionary market is highly diversified in terms of suppliers, including transnational corporations and national, regional and local companies. In contrast, the leading two chocolate manufacturers, namely the Hershey Company and

[15] Hardman and Co, 2014, *Giant on a Pinhead: A Profile of the Cocoa Sector* (London).
[16] *Candy Industry Magazine*, 2014, The face of Fazer, January; *Candy Industry Magazine*, 2014, Global state of the industry, June.
[17] Euromonitor International, 2014, Country report: Chocolate confectionery in France.

Mars, accounted for 65 per cent of the sector's sales in 2014. None of their competitors individually exceeded a 5 per cent share.[18]

B. Vertical integration

13. The cocoa value chain has also experienced significant vertical integration, with companies expanding their activities, from sourcing beans to producing chocolate products. This pattern is not necessarily new. In the past, a number of large chocolate producers managed much of the value chain themselves, from buying beans to processing cocoa butter and powder to making chocolate. Later, many cocoa and chocolate business entities (re)positioned themselves in specific segments of the value chain, with many of them exiting, for example, the less profitable grindings segment. However, an increasing number of mergers and acquisitions in recent years has resulted in a high degree of vertical integration in the industry. This pattern stems partly from the motivation of large companies to gain greater control of cocoa and chocolate products, to satisfy demand in terms of quantity, quality and traceability.[19]

14. The operations of some trading or processing companies have extended down to the farm level (directly via cocoa-buying stations or indirectly through agency relationships). This has created a blurred boundary between trading and processing companies, as major trading transnational corporations are now also engaged in cocoa processing and vice versa. The majority of large cocoa-processing companies also play a significant role in terms of cocoa origination, handling and trading. Companies such as Archer Daniels Midland and Cargill were historically traders of cocoa beans but have now diversified their activities into grinding, producing cocoa powder, butter and liquor and manufacturing chocolate, thereby achieving significant vertical integration in the industry.

15. Other companies historically involved in midstream activities along the cocoa value chain have expanded their businesses to the upstream and downstream segments of the chain, that is, from the production of semi-finished cocoa products to, at one end, the sourcing of cocoa beans and, at the other end, the production of consumer chocolate. For example, Barry Callebaut and Blommer Chocolate Company, which used to process beans and produce semi-finished cocoa products for chocolate manufacturers, have developed interests from sourcing beans to producing chocolate. Large chocolate manufacturers and brand owners, including Mars and Nestlé, are now sourcing cocoa beans from farmers. As a result of these developments, only a few companies remain with operations in only one specific segment of the value chain. In cocoa bean trading, for example, these include, at the international level, Continaf, Novel Commodities and Touton Group and, at the national level, Saf Cacao (Côte d'Ivoire), Roig Agro-Cacao (Dominican Republic) and Akuafo Adamfo (Ghana).

III. Potential impacts of concentration in the cocoa global value chain

16. Concentration in agro-industry contributes to a better allocation of resources and economies of scale along value chains. This ultimately increases cost efficiency along a chain, with benefits passed onto various stakeholders. A fair distribution of benefits, which

[18] Ibid.

[19] C Ménard and PG Klein, 2004, Organizational issues in the agrifood sector: Toward a comparative approach, *American Journal of Agricultural Economics*, 86(3):750−755.

may not have the same meaning between stakeholders, is therefore a key determinant of the success of concentration patterns. With regard to cocoa, increased consolidation may have permitted the attainment of economies of scale and, as such, contributed to improving efficiency in the industry. Moreover, vertical integration in the cocoa industry has helped transnational corporations ensure the traceability and quality required by customers. For example, Barry Callebaut has stated that it can ensure full traceability of cocoa sourced through its subsidiary, Biolands International, based in the United Republic of Tanzania.[20] Some market players, including integrated buyers, view the consolidation process favourably as it reduces the number of competitors.

17. However, concentration may become problematic, especially if it fosters monopolistic behaviour in an industry. Such behaviour increases the bargaining power of large and integrated players to the detriment of small players, including small-scale producers (that is, farmers) and traders as well as purely chocolate manufacturers. It is common for concentration in a segment of an agro-industry value chain to lead to similar changes in other segments; this permits the balancing of bargaining power along value chains.[21] However, as noted above, in the cocoa industry, while there is considerable concentration in the processing and distribution segments of the cocoa value chain, the supply segment (that is, the production of cocoa beans) typically remains fragmented among scattered smallholders. This situation creates an oligopsonistic structure in the cocoa market, that is, a large number of sellers and a limited number of buyers. As a result, farmers are entrenched in a weak bargaining position, which reduces them to price takers, at a time when they also have limited access to finance, market information and agricultural inputs such as improved seeds and fertilizers.[22]

18. Results to date from empirical studies on the potential exercise of oligopoly or oligopsonistic behaviour in the cocoa value chain have been inconclusive. Anang (2011) examined market structure and competition in Ghana’s cocoa sector after the introduction of trade liberalizing reforms and concluded that, despite domination by a few large firms, the market remained competitive.[23] Wilcox and Abbot (2004) used an econometric approach to estimate the degree of market power prevailing in cocoa bean markets in Côte d’Ivoire and Nigeria and found no evidence of market power being exerted by multinational exporters or processors on cocoa farmers in Nigeria, although such power seemed to be exerted in Côte d’Ivoire.[24] Traoré (2009) noted that increased concentration in cocoa trading in exporting countries, especially in West Africa, had reduced competition among buyers and that the cost savings resulting from improved efficiency in the sector rarely passed onto farmers.[25]

19. In chocolate-producing countries, high integration − vertically along the value chain or horizontally in the cocoa processing and chocolate manufacturing segments − is likely to

[20] Barry Callebaut, 2014, *Annual Report 2013–2014* (Zurich, Switzerland).

[21] J Humphrey and O Memedovic, 2006.

[22] See for example UNCTAD, 2015, *Commodities and Development Report 2015: Smallholder Farmers and Sustainable Commodity Development* (New York and Geneva, United Nations publication).

[23] BT Anang, 2011, Market structure and competition in the Ghanaian cocoa sector after partial liberalization, *Current Research Journal of Social Sciences*, 3(6):465−470.

[24] MD Wilcox and PC Abbott, 2004, Market power and structural adjustment: The case of West African cocoa market liberalization, presented at the 2004 American Agricultural Economics Association annual meeting, Denver, Colorado, 1–4 August.

[25] D Traoré, 2009, Cocoa and coffee value chains in West and Central Africa: Constraints and options for revenue-raising diversification. Food and Agriculture Organization of the United Nations All African, Caribbean and Pacific Group of States Agricultural Commodities Programme Paper Series No. 3.

shrink input supply possibilities for purely chocolate manufacturing enterprises. A long-term impact of this may be the closure of enterprises or their acquisition by major consolidated companies. For example, the European Commission stated that the proposed merger of Archer Daniels Midland and Cargill, by eliminating an important competitor, could reduce the choice of suitable suppliers in already concentrated markets, which could lead to price increases, with a negative impact on consumers and, in July 2015, approved the merger on the condition that Cargill divest Archer Daniels Midland's largest chocolate plant in Europe to a competitor to allow cocoa product markets to remain competitive.[26]

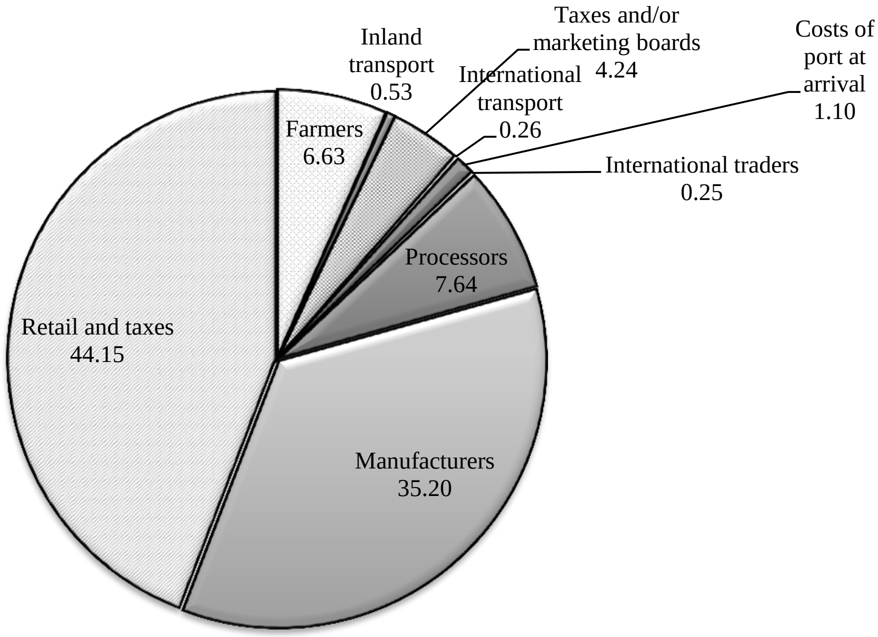
20. Increasing consolidation along the cocoa value chain also increases the risks of anti-competitive practices and tacit or formal collusive behaviour among large players. This was the main argument presented by ComWest of Canada in 2008 when it initiated legal proceedings in the United States against some large players, including the Hershey Company, Mars and Nestlé. ComWest accused these companies of anti-competitive practices, including price agreements in the global chocolate market.[27]

21. Market concentration in the cocoa industry may potentially have positive and negative impacts on stakeholders along the value chain. The situation of smallholding farmers – the backbone of world cocoa production – is of particular concern for a sustainable cocoa economy, as their already weak position in the value chain continues to be undermined by other well-integrated stakeholders, including traders, processors and manufacturers of cocoa and chocolate products. As a result, farmers have very limited room to negotiate appropriate prices for their output to cover production costs and leave them a margin for a decent livelihood. Estimates suggest that farmers only receive about 7 per cent of the total value added to 1 ton of cocoa beans sold. The majority of added value accrues to other stakeholders, including manufactures and retailers (figure 5).

[26] European Commission, 2015, Mergers: Commission opens in-depth investigation into Cargill and Archer Daniels Midland's proposed industrial chocolate merger, available at http://europa.eu/rapid/press-release_IP-15-4479_en.htm (accessed 27 June 2016).

[27] J Cappelle, 2008, Towards a sustainable cocoa chain: Power and possibilities within the cocoa and chocolate sector, Oxfam International Research Report.

Figure 5
Distribution of value added to 1 ton of cocoa along the global value chain



Source: UNCTAD secretariat calculations based on Cocoa Barometer, 2015, *Cocoa Barometer 2015*, available at http://www.cocoabarometer.org/Download.html (accessed 27 June 2016).

22. In absolute terms, cocoa farmer revenues are very low. The International Labour Rights Forum estimates that the net earnings of a typical cocoa farmer with 2 hectares of land in the leading two cocoa-producing countries, Côte d'Ivoire and Ghana, are about \$2.07 and \$2.69 per day, respectively. These amounts are just above the global poverty line of \$1.90 per person per day and do not permit farmers and their families to enjoy a decent livelihood.[28] As the average size of a rural household in these countries may exceed five people, it seems evident that daily net income per person in the cocoa-producing communities may be much lower than the global poverty line.

23. This situation is prevalent not only in cocoa farming communities but is a common occurrence in the agricultural sector, in particular in the developing world. Consequently, the livelihoods of farmers in most agricultural commodity-producing countries is generally poor, a situation that discourages most young people from considering farming as a viable business option. Young farmers therefore seek opportunities that provide better livelihoods, including more remunerative off-farm activities, or migrate to capital cities in search of better careers. Such developments undermine the sustainability of the global agricultural economy and may seriously threaten agribusinesses if not addressed through concerted actions (chapter IV). Therefore, empowering farmers to increase incomes through higher domestic prices for output, often termed producer prices, becomes a sine qua non for sustainability of the agrifood sector.[29] This may help attract young generations of farmers, as they may thereby perceive the sector as a viable source of a sustainable livelihood.

[28] International Labour Rights Forum, 2014.
[29] It is also essential to increase the productivity of farming activities. However, this aspect is beyond the scope of this note.

IV. Policy recommendations

24. As seen in the cocoa sector, concentration prevails in agricultural commodity value chains, along with the scattered nature of smallholding farmers, who are the mainstays of most value chains. This results in power imbalances along value chains and creates a favourable environment for the abuse of market power by large players.[30] If such a market structure prevails unchecked, it effectively undermines competition in agrifood value chains, adding further downward pressure to prices paid to farmers. If there are a limited number of large players along value chains, this not only creates a favourable environment for anti-competitive practices, but almost certainly reduces bargaining room for fragmented farmers. As a result, the latter may not be able to bargain for higher and fairer prices for their outputs. To promote sustainable agricultural commodity value chains, it is critical to empower farmers, in the face of increasing concentration along value chains. In this regard, policies aimed at keeping value chains competitive and promoting strong farmer-based organizations are crucial. Such policies are detailed in this chapter.

A. Promoting competitive agricultural commodity value chains

25. As noted, the current structure of agricultural commodity value chains results in power imbalances between highly integrated large players and smallholders, especially small-scale farmers. Therefore, creating a level playing field for all stakeholders in value chains, by ensuring competitive markets at national and international levels, is critical to empowering dispersed smallholders. Typically, this entails two measures.

26. First, it is imperative to enact, or reinforce, competition law in agricultural commodity-producing countries in order to prevent anti-competitive practices and limit the market power of trading or processing companies that source their inputs from farmers. Challenges in such countries with respect to competition law are often related to two issues, namely, how to enact and enforce such law and how to address the difficulties faced by legislators due to the extraterritorial characteristics of national markets, stemming from the fact that major transnational corporations active in trading or processing agrifood do not fall under the jurisdiction of producing countries. The former challenge may be addressed by improving institutional capacities at the national level, with strong competition agencies. Addressing the latter challenge almost certainly requires harmonization of the rules dealing with anti-competitive practices, as well as cooperation between competition agencies at the international level, with effective oversight by an international body.

27. Second, competitive domestic cocoa markets require a supportive environment for local small players, such as small-scale traders and agrifood processors, to remain in business. A key driver of the high concentration of buyers in the domestic agricultural markets of producing countries is the difficulties faced by local small players in competing on a level playing field with multinational corporations, as the latter have better access to resources such as finance. Keeping local stakeholders, including local small and medium-

[30] This issue is fairly well documented; see PW Dobson, R Clarke, S Davies and M Waterson, 2001, Buyer power and its impact on competition in the food retail distribution sector of the European Union, *Journal of Industry, Competition and Trade*, 1(3):247−281; BK Goodwin, 1994, Oligopsony power: A forgotten dimension of food marketing? *American Journal of Agricultural Economics*, 76(5):1163−1165; DJ Menkhaus, JS St Clair and AZ Ahmaddaud, 1981, The effects of industry structure on price: A case in the beef industry, *Western Journal of Agricultural Economics*, 6:147−153; B Shepherd, 2004, Market power in international commodity processing chains: Preliminary results from the coffee market, Institute of Political Studies, World Economy Group.

sized enterprises, involved in national value chains requires addressing the high costs of finance. Keeping local stakeholders in business may also help improve value added activities locally, which in turn could result in higher prices paid to farmers. For example, in Malaysia, due to a package of financial incentives for local players, including investment tax allowances or partial tax exemptions, several local entrepreneurs have become directly involved in the cocoa sector, which contributes to retaining more value at the national level.[31]

28. The promotion of competitive markets should be complemented by actions helping farmers deliver their outputs as a group. This calls for organizing them in strong farmer-based organizations.

B. Promoting farmer-based organizations

29. The scattered nature of farmers, the small scale of their activities and their low levels of organization place them in a weak bargaining position vis-à-vis increasingly integrated buyers, and may prevent them from negotiating higher prices. Organizing farmers into well-functioning farmer-based organizations may help address the problem of dispersion and counteract buyer power and, in turn, enable farmers to negotiate higher prices. Strong cocoa-related farmer-based organizations have helped members, for instance in Cameroon, to negotiate better prices for their crops and have allowed them to attain economies of scale in supplying cocoa beans while limiting quality-related risk.[32] Moreover, farmer-based organizations facilitate member access to output markets and assist farmers to procure inputs such as seeds and fertilizers in bulk. They also provide farmers with better access to finance and extension services, which in turn reduces their production costs while increasing their productivity, thereby increasing their profit margins and incomes.

30. Strong farmer-based organizations may play a crucial role in representing and protecting the interests of their members. In the cocoa sector in Côte d'Ivoire and Ghana, for example, the underrepresentation of farmers in producer price-setting committees has meant that they are denied a voice in matters that affect them.[33] In Côte d'Ivoire, only 3 of the 12 members who set farm gate prices for cocoa are farmers and, in Ghana, only one farmers' representative, referred to as a chief farmer, participates in the meetings of the committee that reviews the minimum prices paid to the country's cocoa farmers.[34] As a result, the representation mechanism, which should work to unite and identify the needs and opinions of farmers to counteract the power of cocoa buyers, is weak.

31. Despite the benefits that farmer-based organizations can potentially bring to farmers and other players along the cocoa value chain, their formation and effective functioning in agricultural commodity-producing countries are frustrated by several impediments, including a weak enabling environment and lack of resources. Where farmer-based

[31] African Centre for Economic Transformation, 2014, The cocoa agroprocessing opportunity in Africa, available at http://acetforafrica.org/publication/the-cocoa-agroprocessing-opportunity-in-africa/ (accessed 27 June 2016).

[32] MD Wilcox and PC Abbott, 2006, Can cocoa farmer organizations countervail buyer market power? presented at the 2006 American Agricultural Economics Association annual meeting, Long Beach, California, 23–26 July.

[33] International Labour Rights Forum, 2014.

[34] Ibid.

organizations exist, their activities may be hampered by factors such as the gender gap, unrealistic objectives, mismanagement, corruption and political interference.[35]

32. Governments, the private sector, non-governmental organizations and donors all have a role in assisting the formation of strong farmer-based organizations. Governments should provide an enabling environment, including a strong regulatory and institutional framework, to support the emergence and growth of effective organizations. They should also help improve the technical and managerial capacities of farmers, while encouraging them to set modest and achievable goals for their organizations. Working in concert with non-governmental organizations and donors, including the private sector, Governments should give priority to the development of organizations in their agricultural development programmes, while identifying the business models of successful organizations based on their country-specific characteristics. Considering that smallholders often lack the seed capital and managerial skills necessary to establish an organization, a sustainable business model for organizations under public, private and producer partnerships could be the most effective option. For example, under such partnerships, subsidized seed capital could be provided to farmer-based organizations, and such subsidies reduced over time.[36]

V. Concluding remarks

33. The policy options discussed in this note are not enough to enhance the integration of small-scale and scattered farmers into agricultural value chains at a time when they must deal with a highly concentrated industry. Such policies should effectively be complemented by pro-farmer trade and agricultural development policies and other actions that contribute to improving the efficiency of agrifood value chains for all stakeholders. The role of Governments in shaping adequate policies and building strong institutional frameworks is important.

34. Through commodity development boards, Governments of agricultural commodity-producing countries may potentially play a useful role in helping farmers counteract the market power of large players.[37] Past difficulties faced by commodity marketing boards in developing countries should not be seen as a reason for Governments to refrain from assisting farmers, particularly as such boards may have provided invaluable services and support to farmers. A key advantage of such boards is that, if they are accountable to Governments and farmers, they are more likely to meet public policy objectives than a private agribusiness, particularly if the latter is a dominant world player.[38] The main issue in the past with regard to such boards was inefficient management, which should be addressed by reforms. For example, research suggests that focused reforms undertaken in Ghana by the Cocoa Board have enabled it to improve the productivity and income of farmers.[39] This suggests that state institutions, such as agricultural development boards, may be successful in supporting smallholding farmers under certain conditions, including good governance, accountability and a clear understanding of the challenges facing small-scale producers. Nevertheless, there are areas in which government capacity and expertise may be limited and in which other stakeholders, including the private sector, civil society

[35] UNCTAD, 2015.

[36] For the least developed countries and other low-income countries, this could be provided under green box measures.

[37] S Murphy, 2006, Concentrated market power and agricultural trade, Ecofair Trade Dialogue Discussion Papers No. 1.

[38] Ibid.

[39] T Williams, 2009, An African success story: Ghana's cocoa marketing system, Institute of Development Studies Working Paper No. 318.

and international organizations (such as the Common Fund for Commodities, International Cocoa Organization and UNCTAD), may play a complementary role. Therefore, to be effective, each policy for supporting farmers should be country-specific, while adopting a multi-stakeholder approach engaging all stakeholders along the global value chain, leveraging the specific comparative advantage of each entity.