Medium Term Agricultural Trade Outlook for developing countries, and Institutions for Assuring Grain Import Supplies for Net Food Importing Countries

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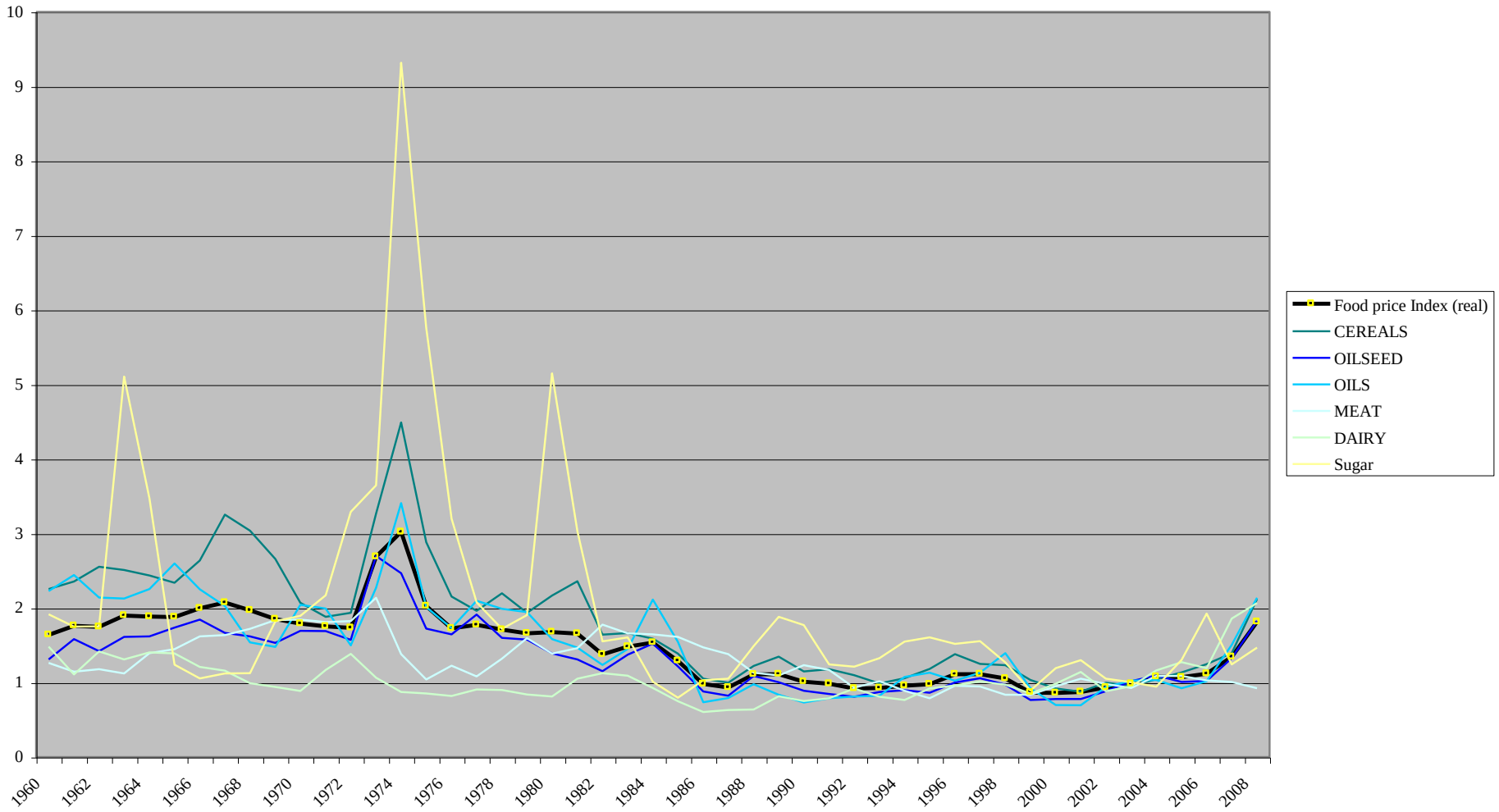
Plan of Presentation

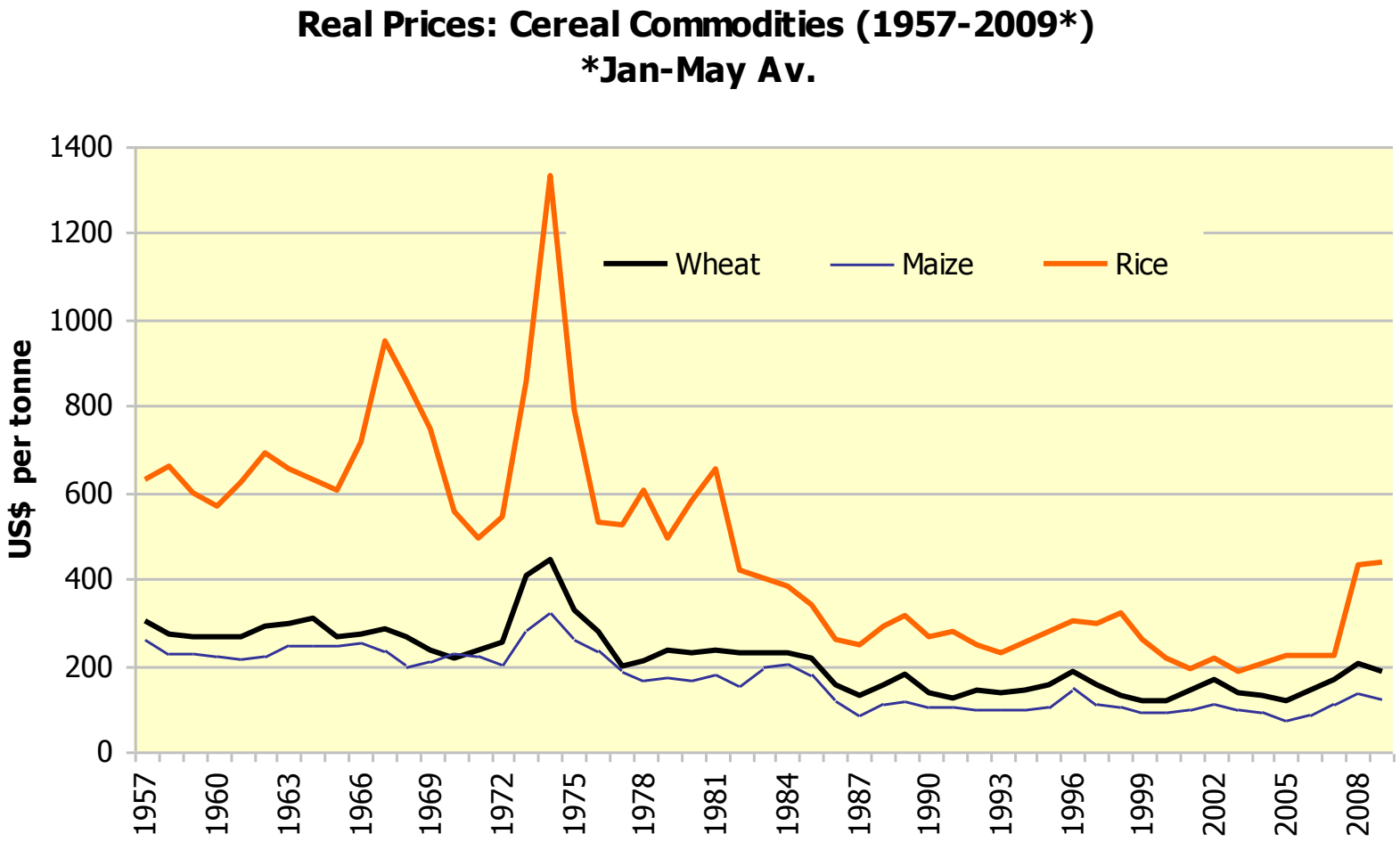
- Medium term outlook for agricultural markets and developing countries
- Medium and long term agricultural trade developments and issues
- Global grain price volatility
- Factors affecting grain market volatility
- Problems of access to grain imports
- Assuring adequate grain supplies for world markets
- An International Grain Clearing Arrangement for assurance of import grain supplies
- A Food Import Financing Facility for low income countries

Is there an end of cheap food?

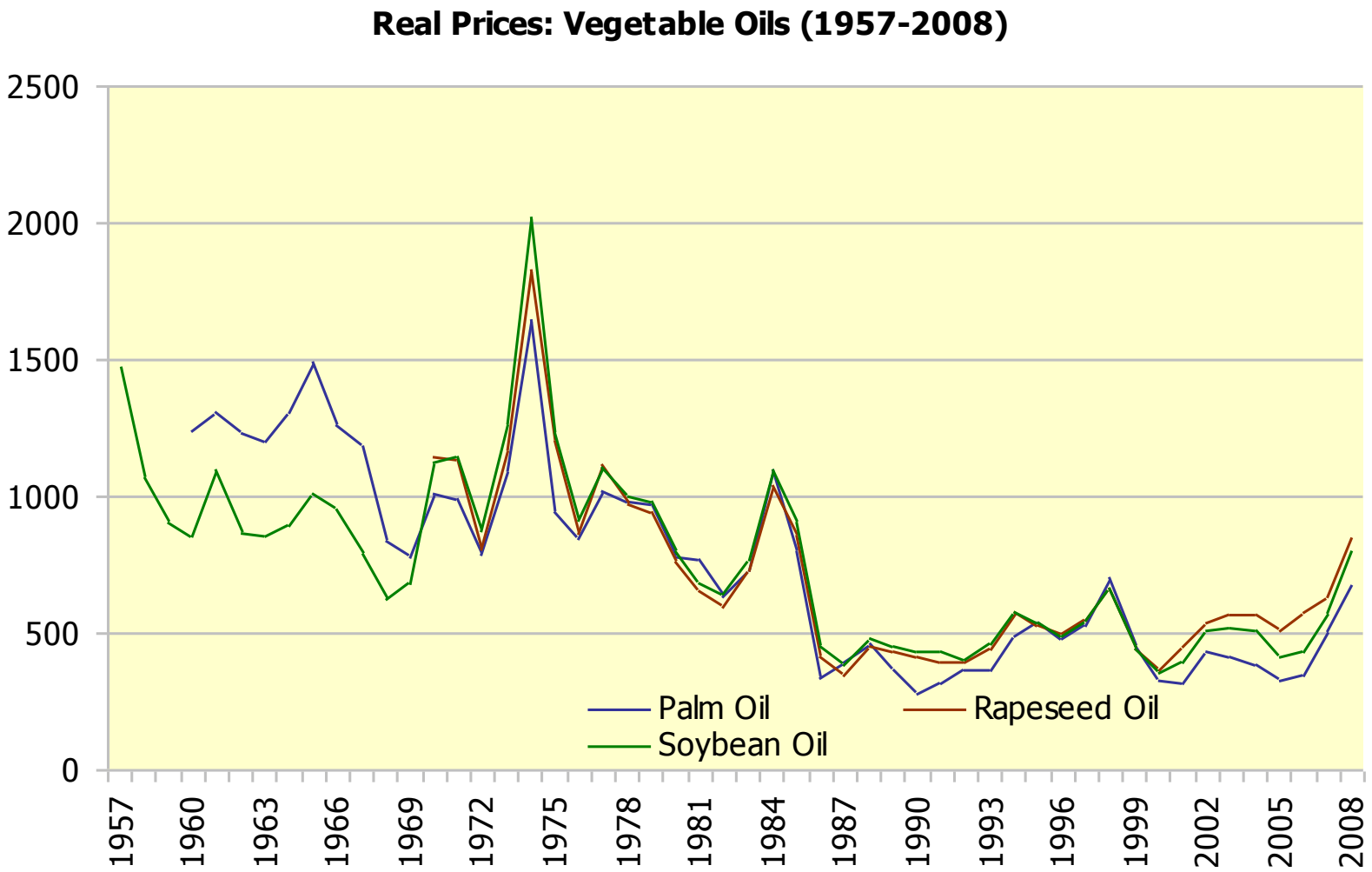
FAO real food price indices



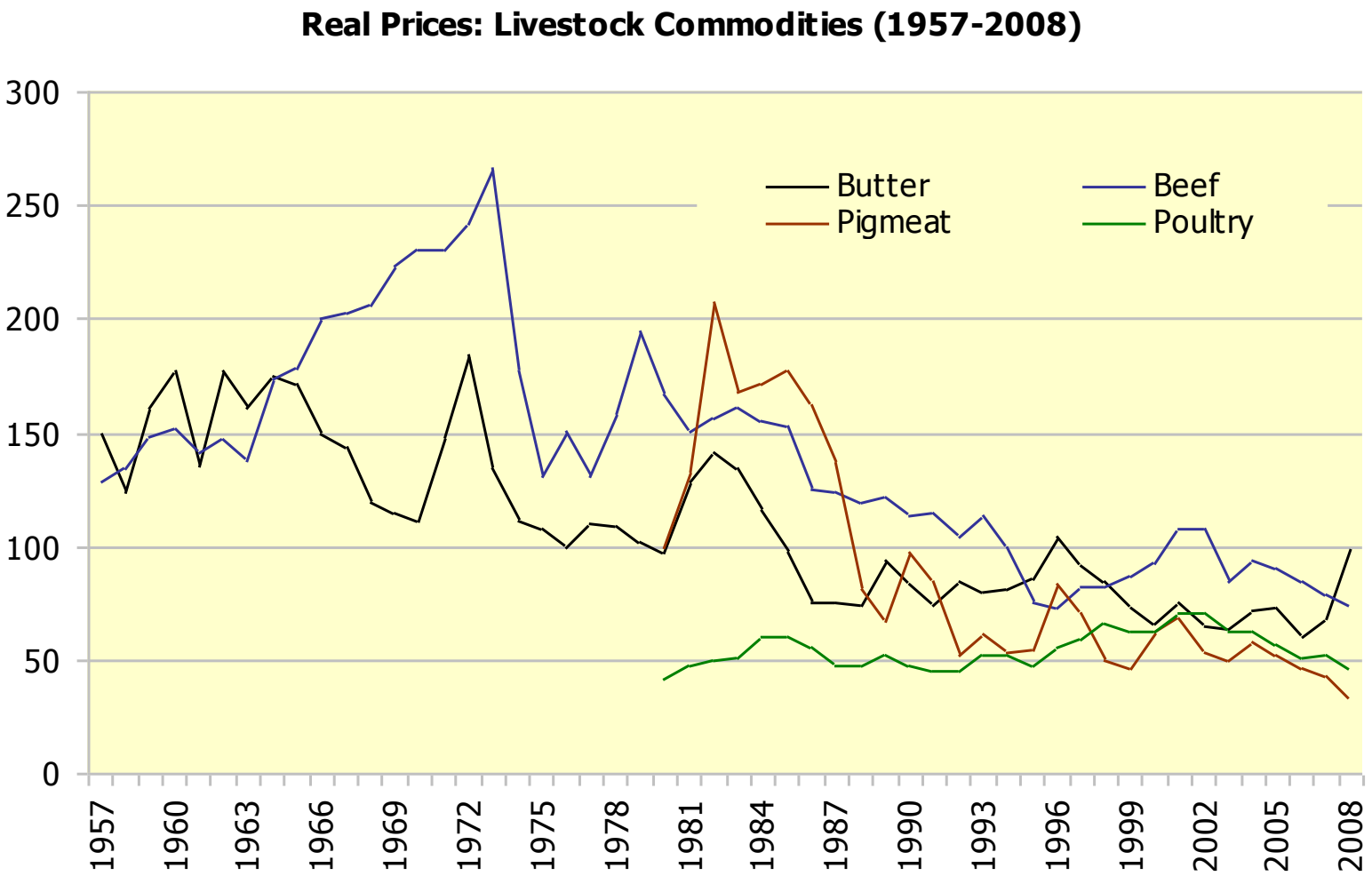
Real prices of grains have tended to decrease but since mid 1980s tendency seems to have stopped and may have reversed in 2008-9



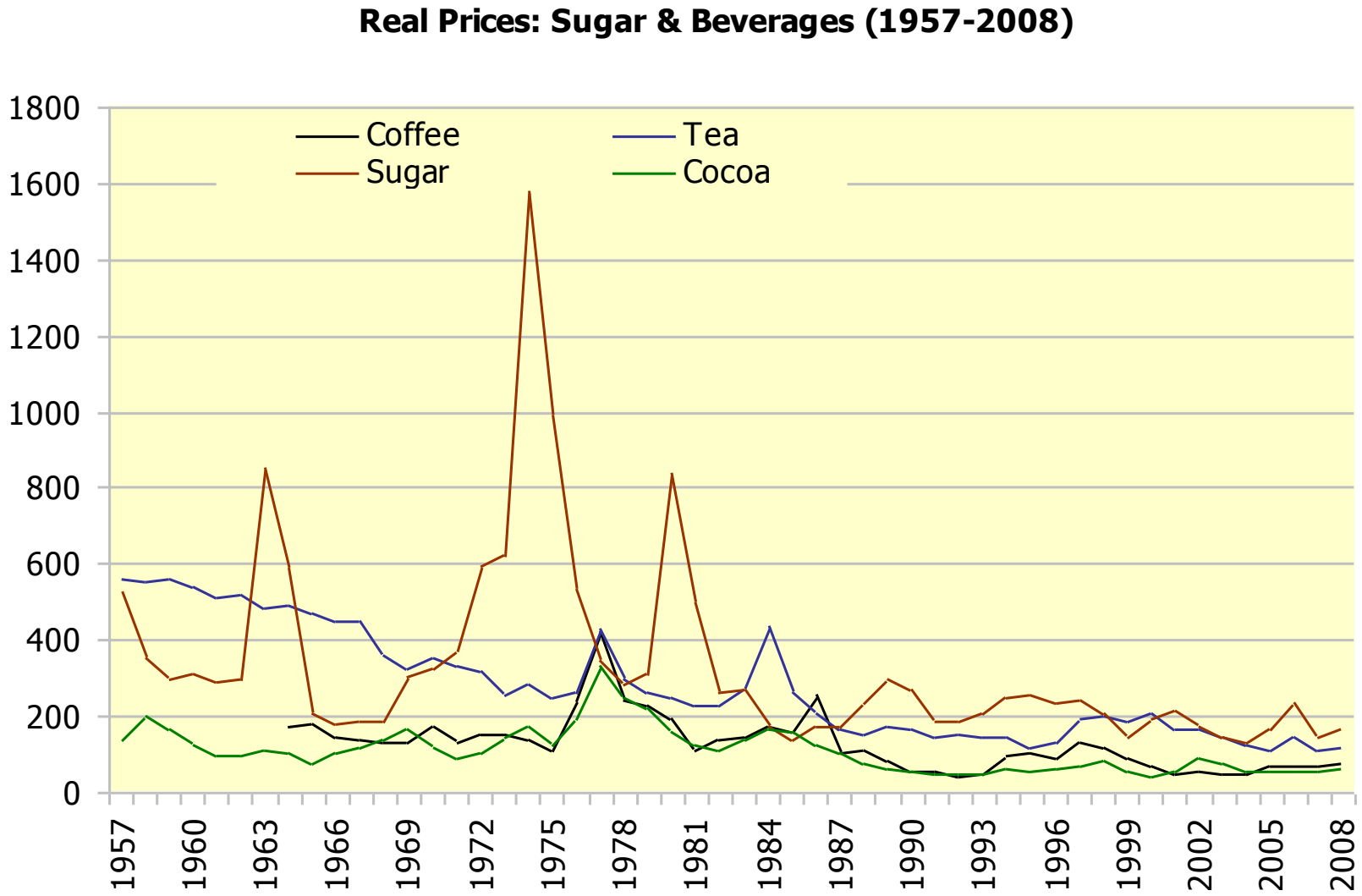
Real prices of vegetable oils have tended to decrease but since mid 1980s tendency seems to have stopped



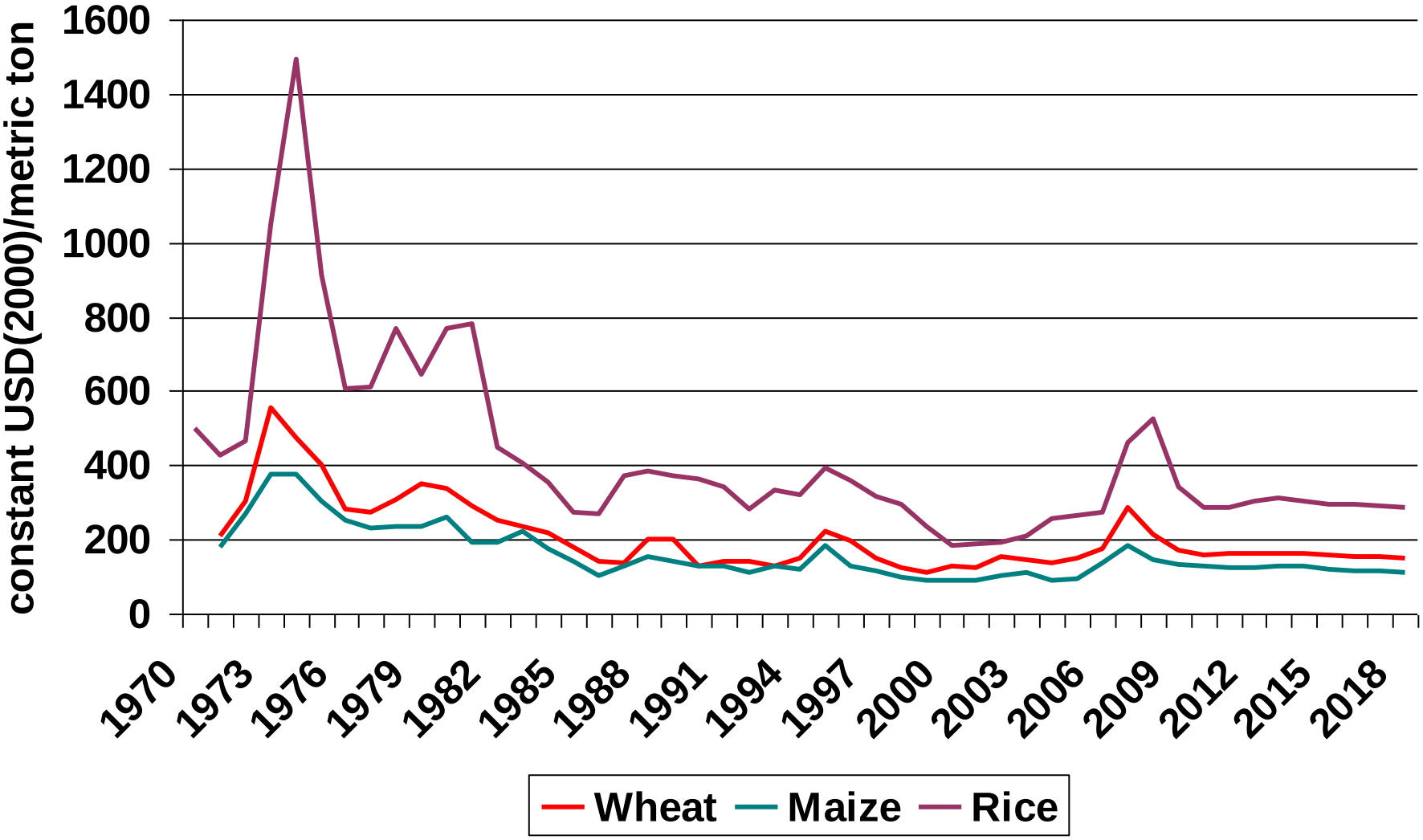
Real prices of livestock commodities have tended to decrease albeit at slowing pace since mid 1980s



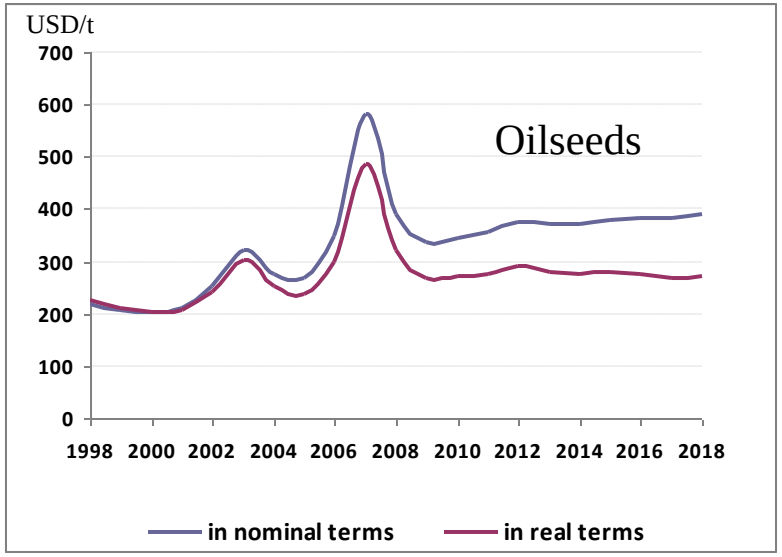
Real prices of sugar and beverages have tended to decrease but since mid 1980s tendency seems to have stopped

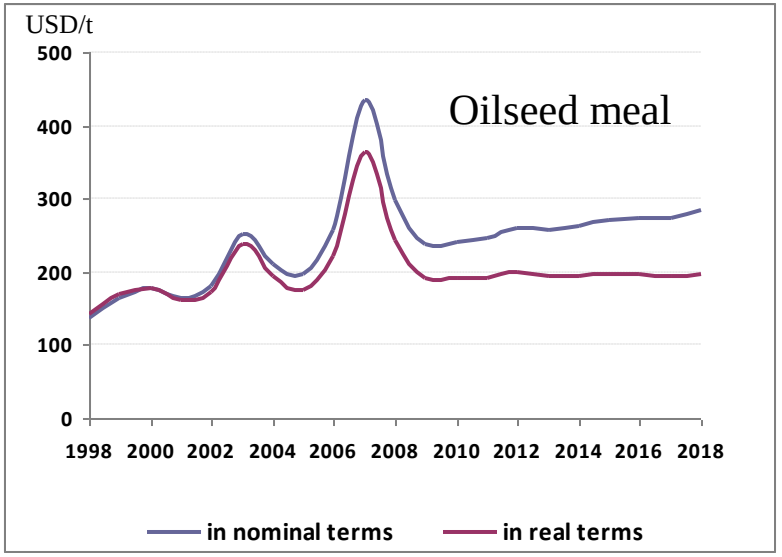


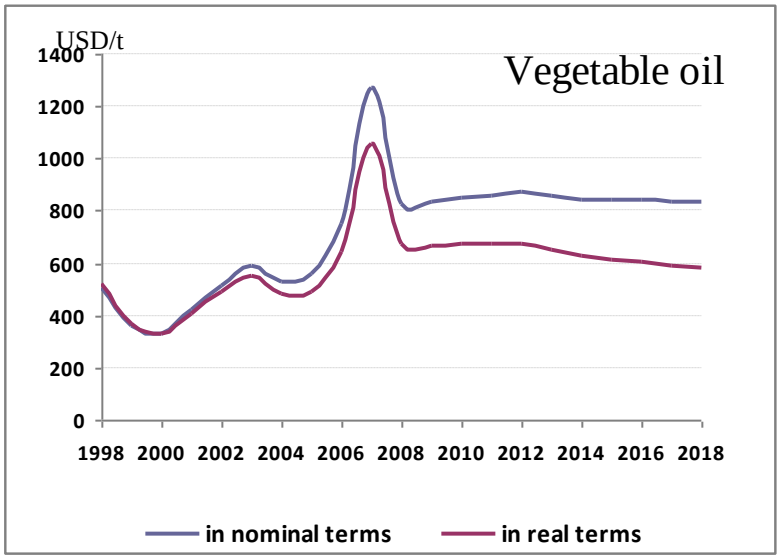
Medium term outlook. Real cereal prices: Is there “really” a trend decline?



Medium term outlook. Oilseeds and products world prices return close to previous levels in real terms





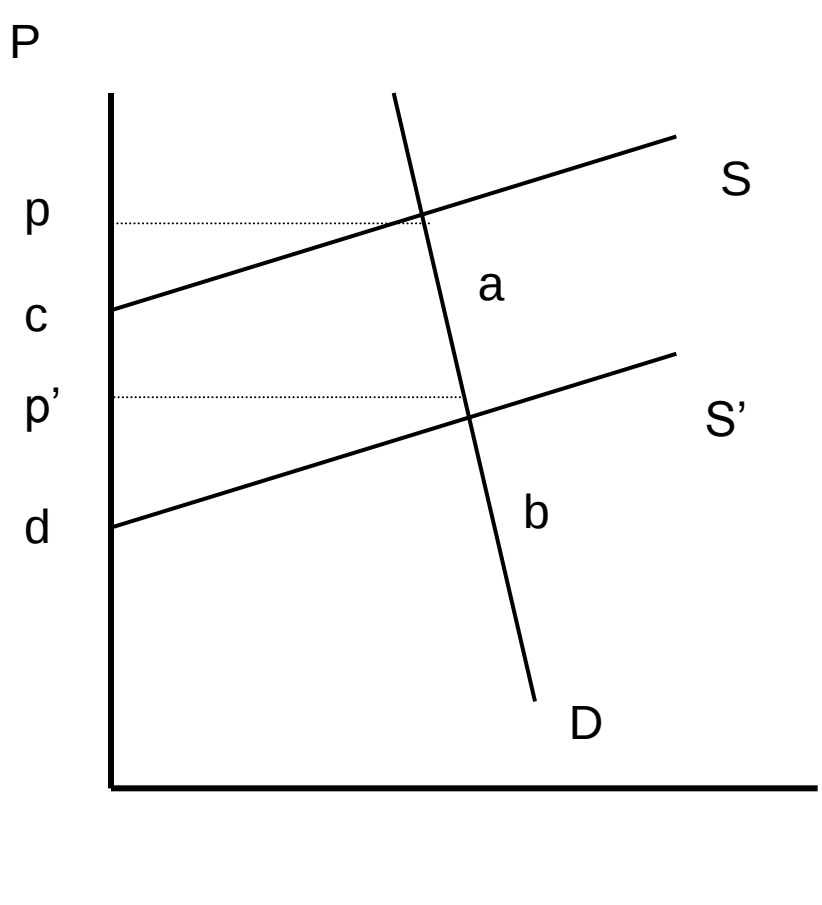


What determines long term commodity prices?

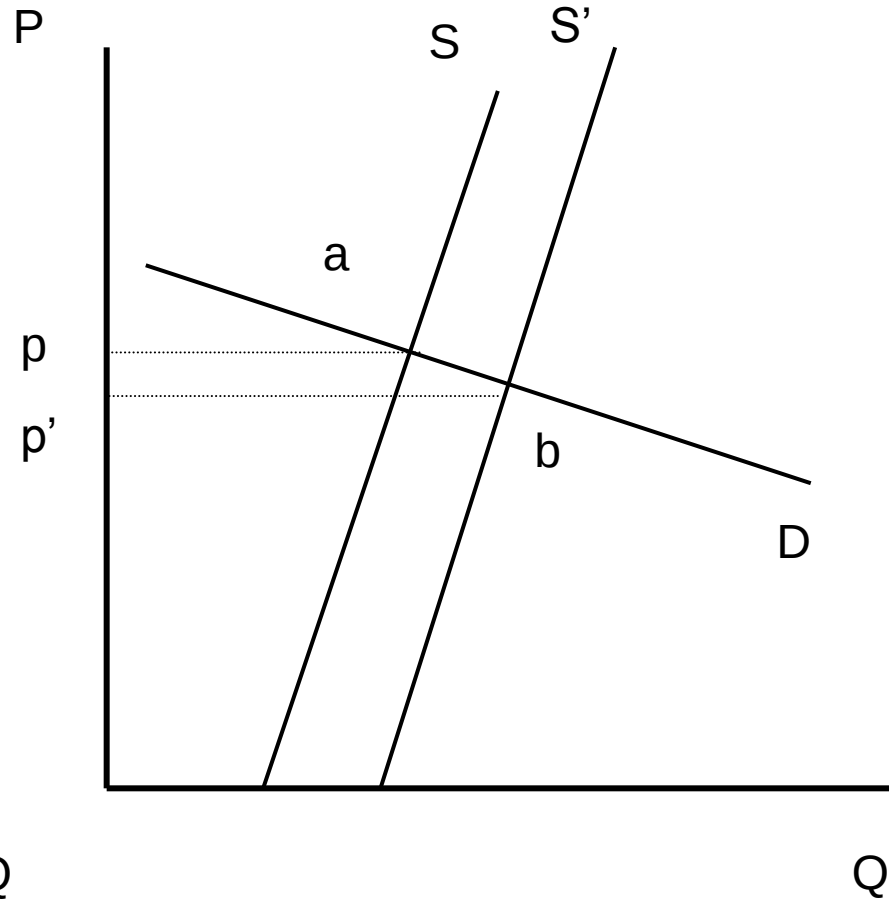
- Supply of agricultural commodities highly elastic at low wages
- Demand for agricultural commodities quite inelastic
- Opposite case for non-agriculture
- Implication: Equal of faster productivity gains for agriculture can lower terms of trade between agriculture and non-agriculture

How do productivity gains affect agriculture and non-agriculture?

- Productivity affects agriculture differently than non-agriculture



Panel A. Agricultural Commodity Sector



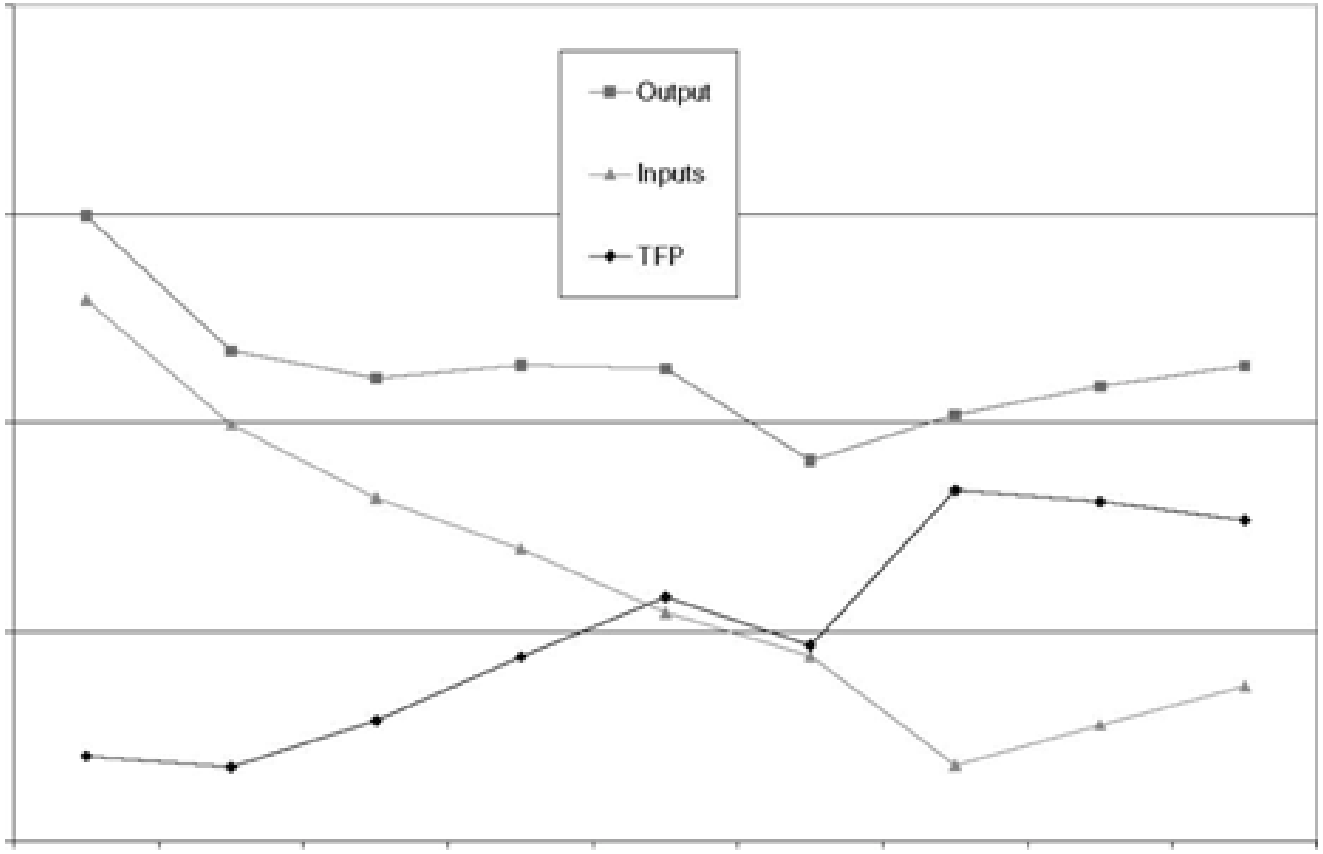
Panel B. Non-agricultural sector

Declining terms of trade for agricultural commodities has been due to faster rates of total factor productivity growth for agricultural than non-agricultural products

- Rate of growth of TFP has been faster in agriculture than in non-agriculture
- The rate of growth of TFP in agriculture seems to be higher than that of manufacturing.
- “Globalization” of agricultural research, has contributed to faster TFP growth in agriculture,
- Incidence of productivity advances largely on consumers (through lower prices) and little to producers.
- Has productivity growth slowed down?
- Has productivity growth lagged in LDCs?

Agricultural productivity developments for the world. Source: Fuglie (2008)

Average annual growth rate by period (%)	Output index	Input index	TFP index	Output per worker	Output per hectare	Grain yield (t/ha)
1970–1989	2.24	1.36	0.87	1.25	1.96	2.29
1990–2006	2.06	0.50	1.56	1.51	1.95	1.35



Annual TFP growth in agriculture does not appear to have slowed down for the world. Hence most likely reason for real price leveling must be lower inputs and faster demand growth

	1970–1979	1980–1989	1990–1999	2000–2006
Developing countries	0.55	1.67	2.31	2.08
Developed countries	1.62	1.48	2.25	1.76
USSR & Eastern Europe	-0.46	0.27	1.59	2.10
World	0.60	0.94	1.60	1.55

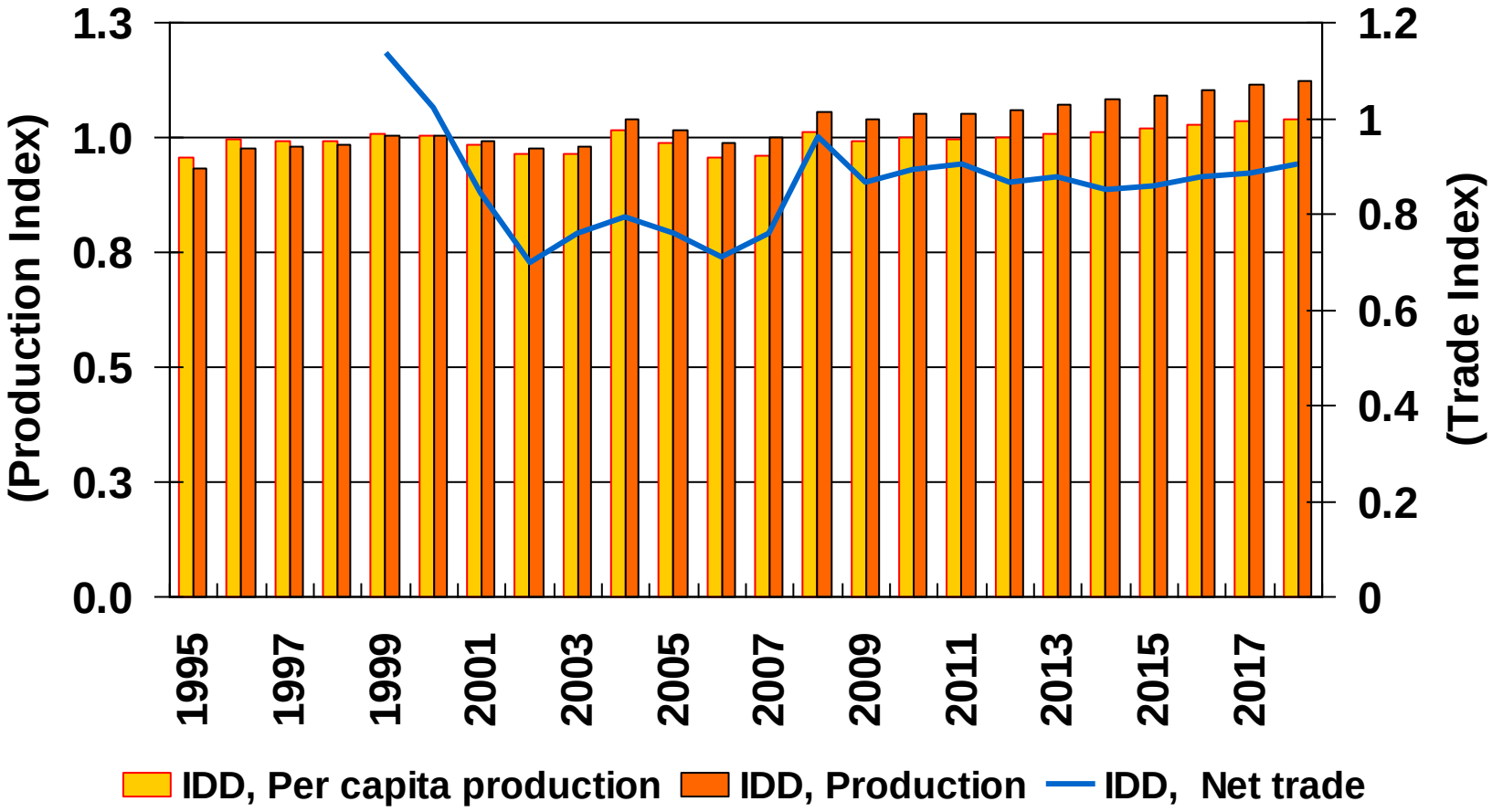
Source: Fuglie, 2008

Outlook country grouping definitions

- Industrialized
- BRIC – Brazil, Russia, India, China
- LDC - UN LDC list
- Other developing

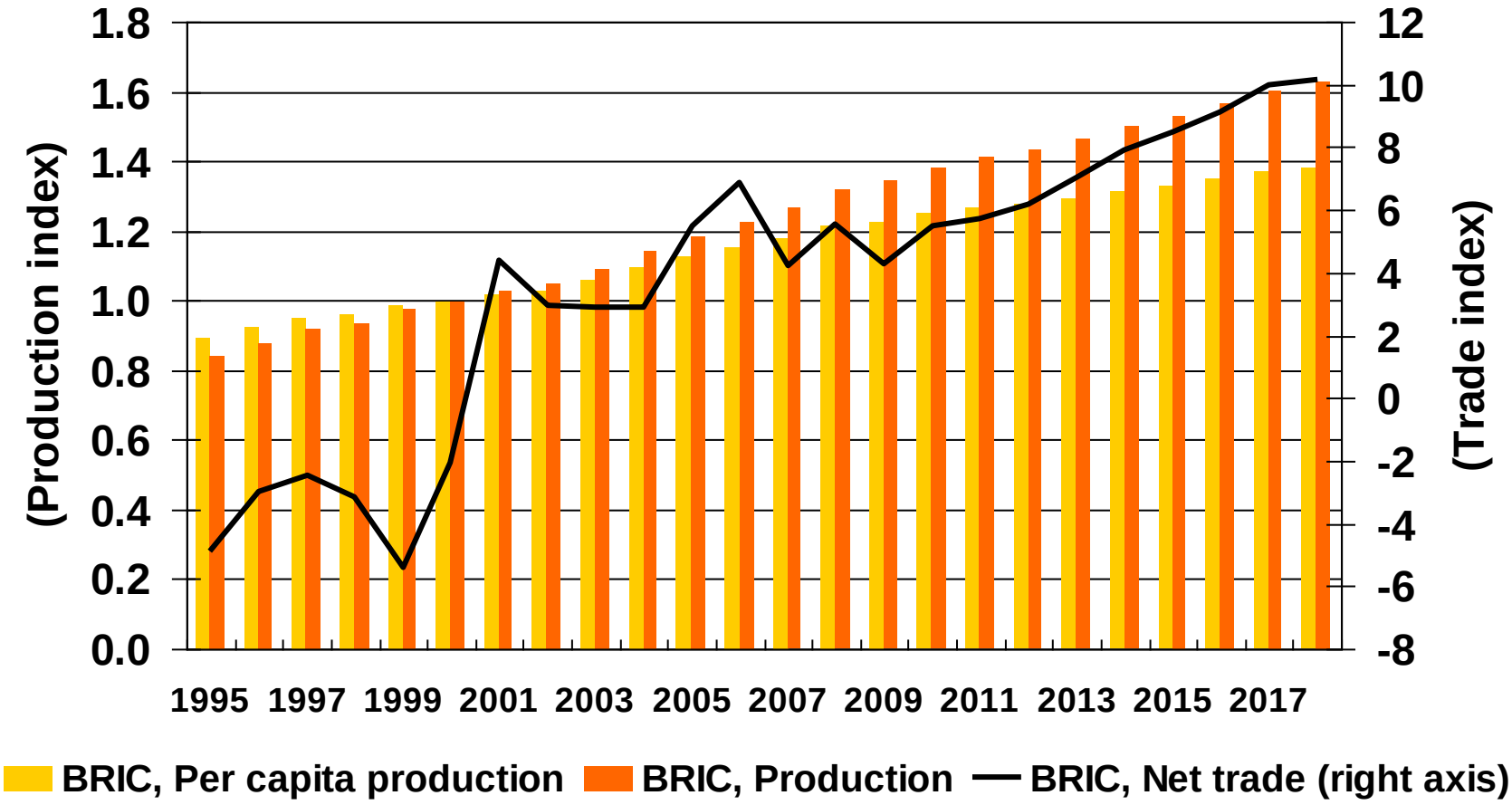
World – Industrialized – BRIC – LDC

Agricultural production and trade
Industrial Countries
(Base 1999-2001 =1)

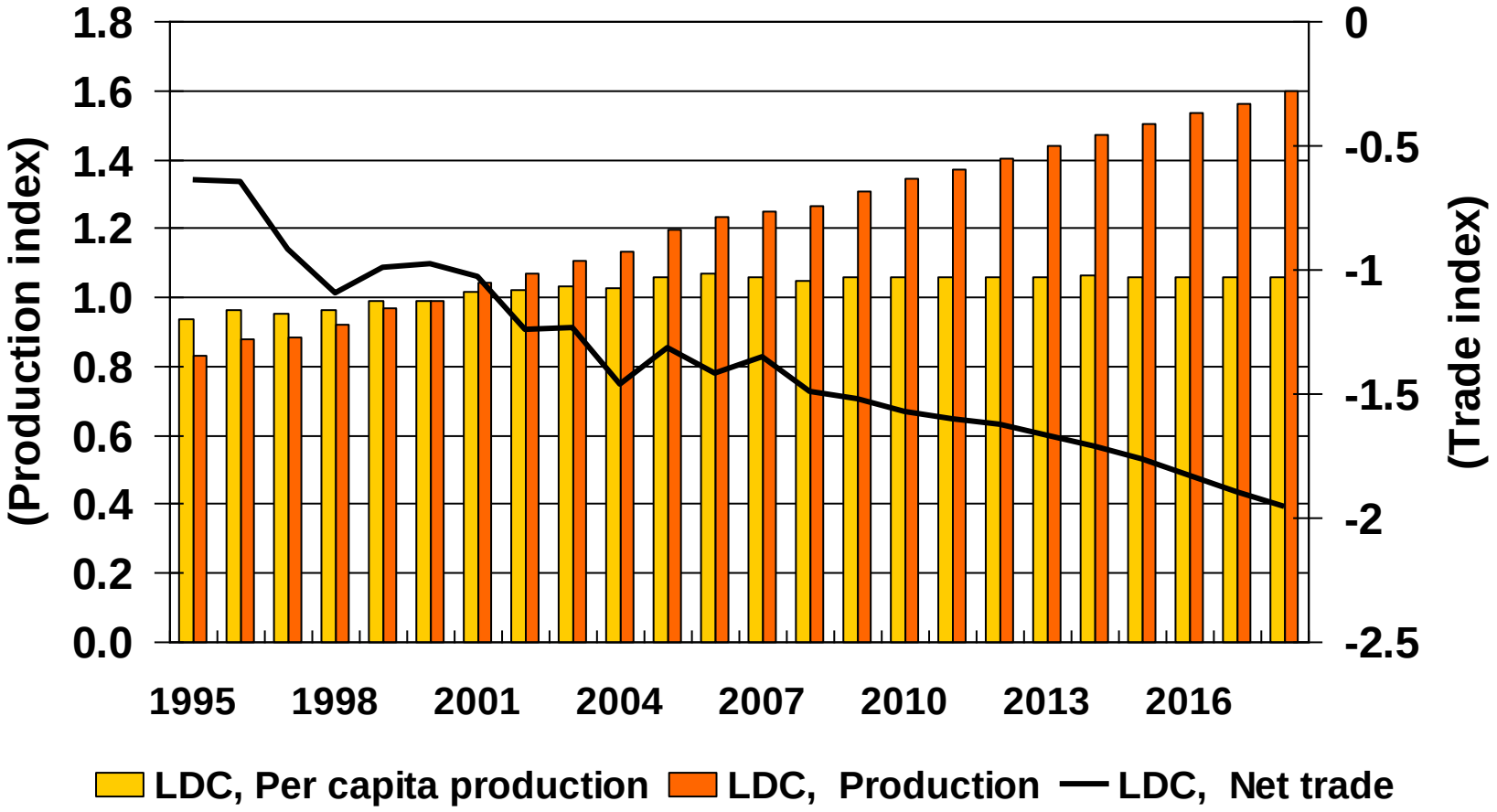


Agricultural production and trade - BRIC

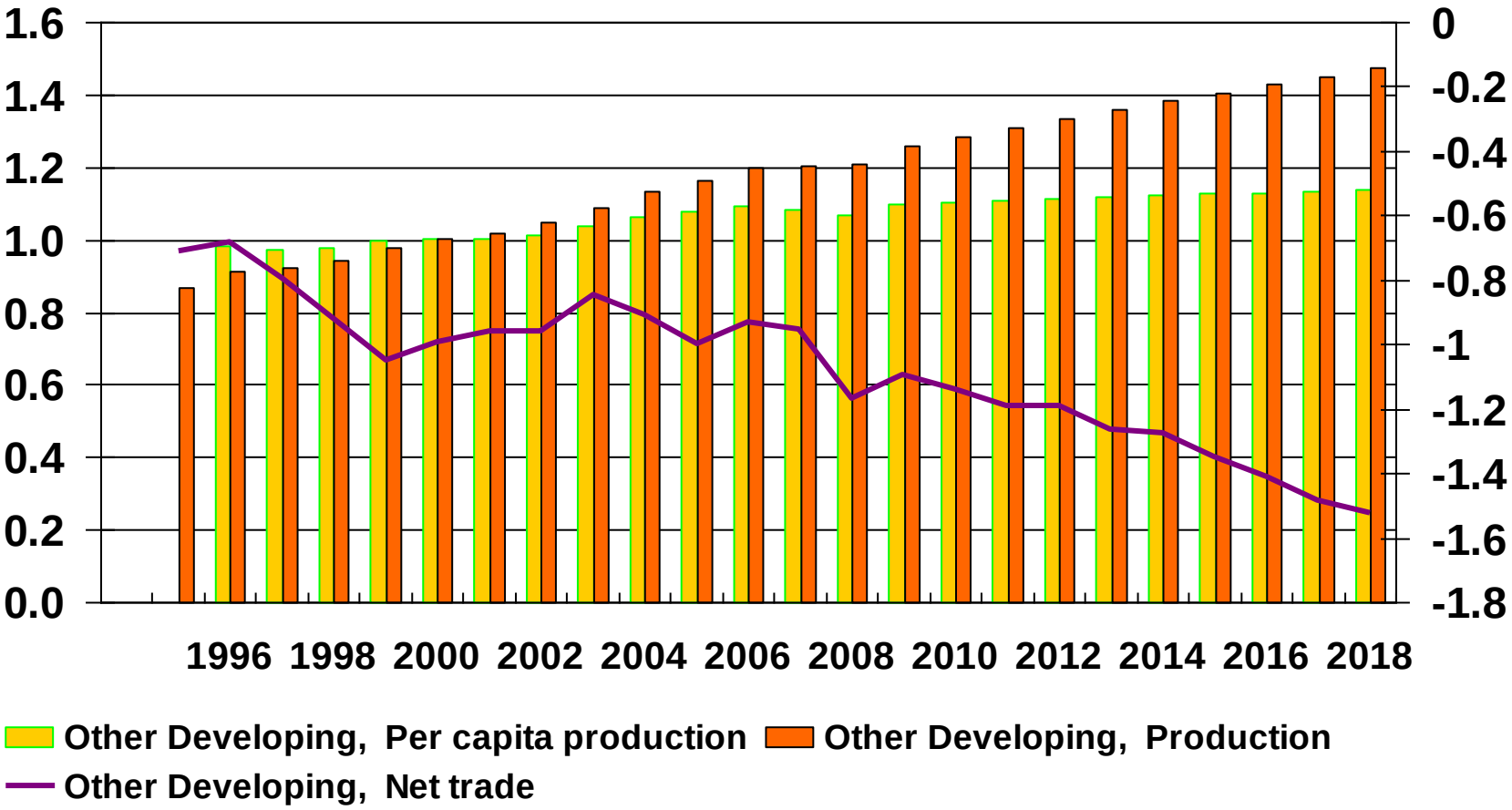
(Base 1999-2001 =1)



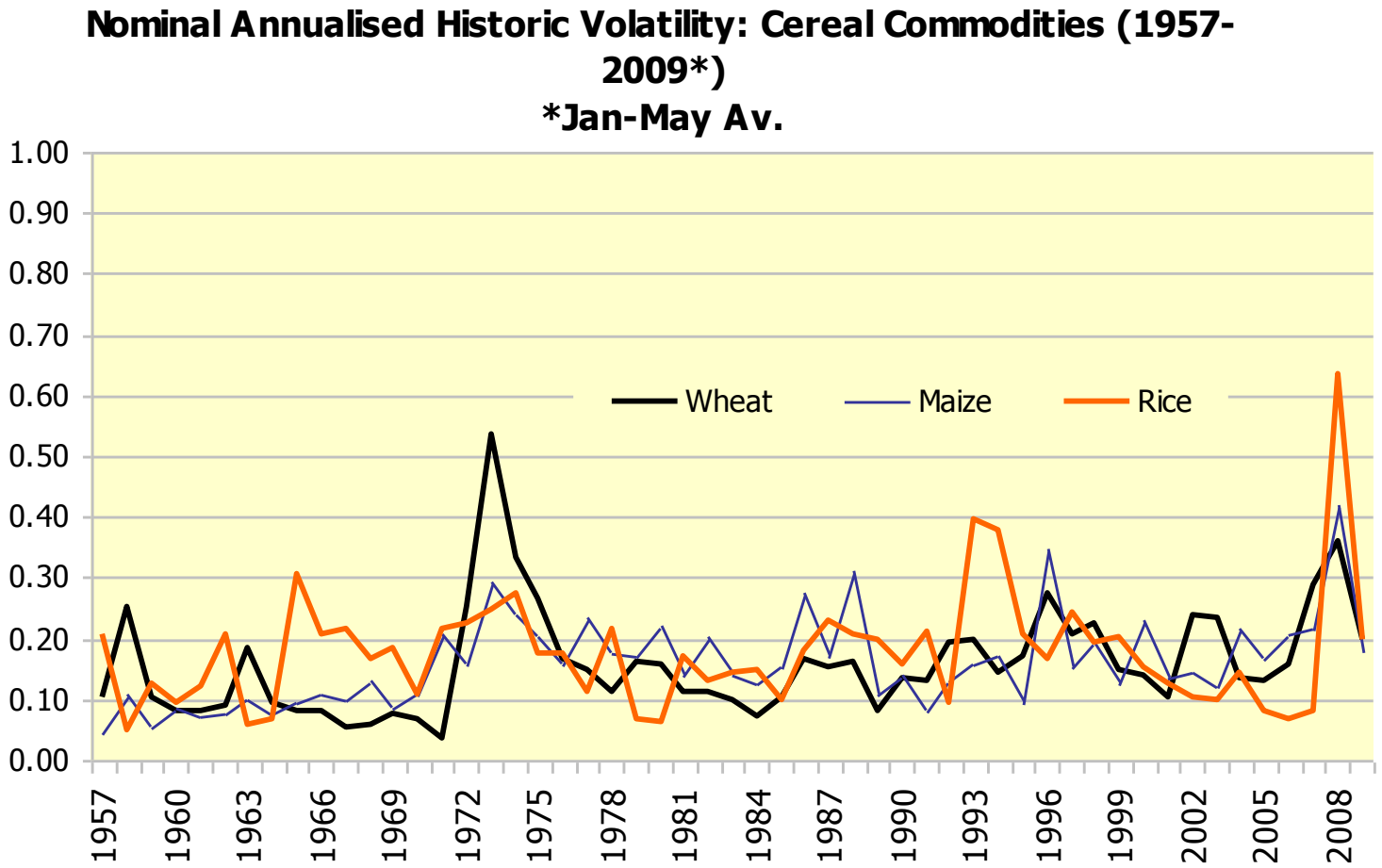
Agricultural production and trade
LDC Countries
(Base 1999-2001 =1)



Agricultural production and trade
Other Developing (non-LDC, non-BRIC)
(Base 1999-2001 =1)



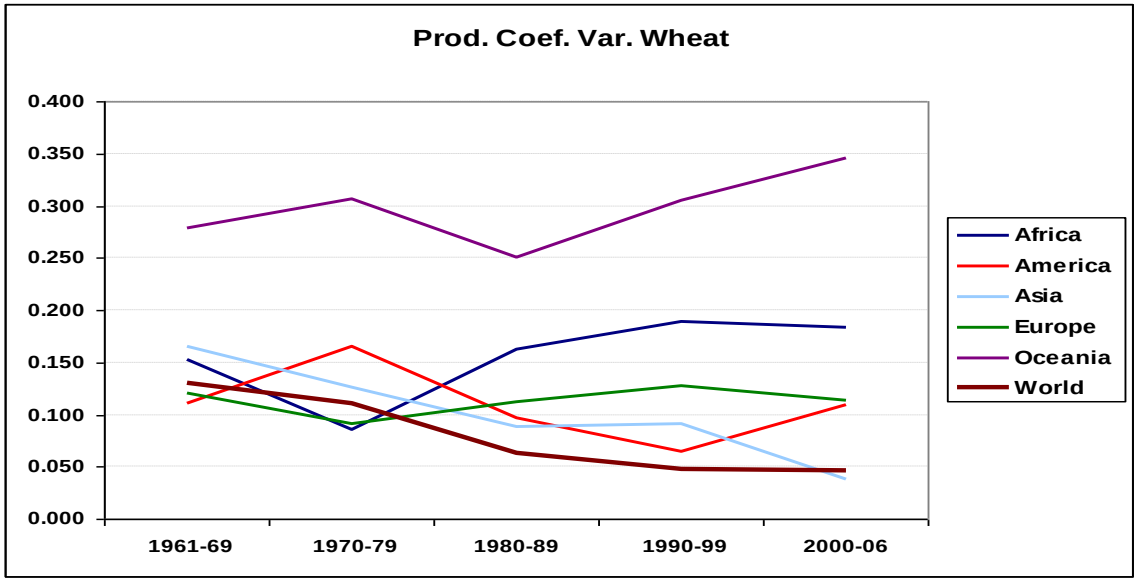
Grain price volatility does not seem to have increased over time

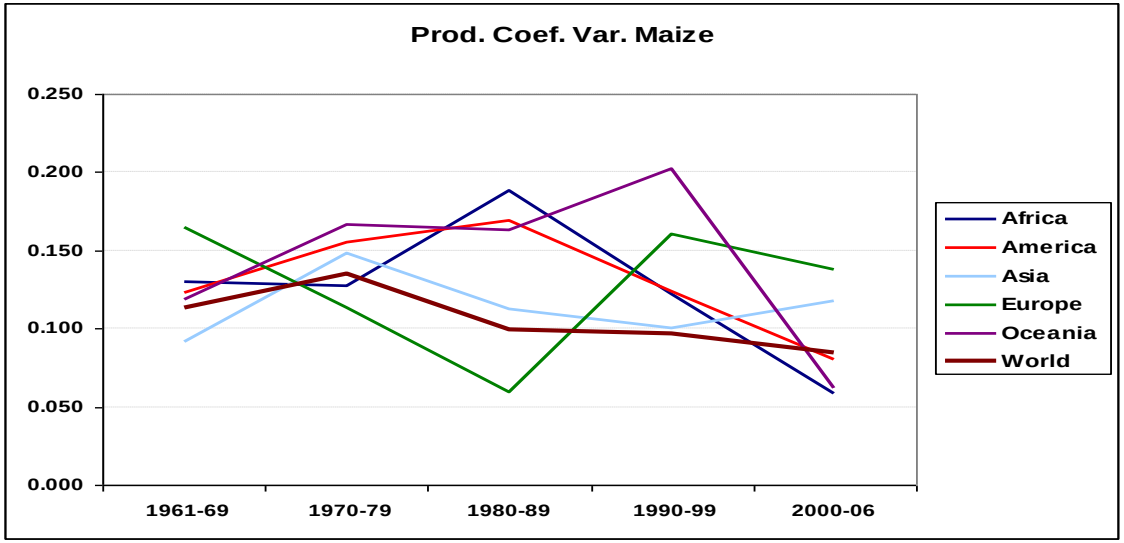


Main factors that will affect future agricultural price volatility (new factors in blue)

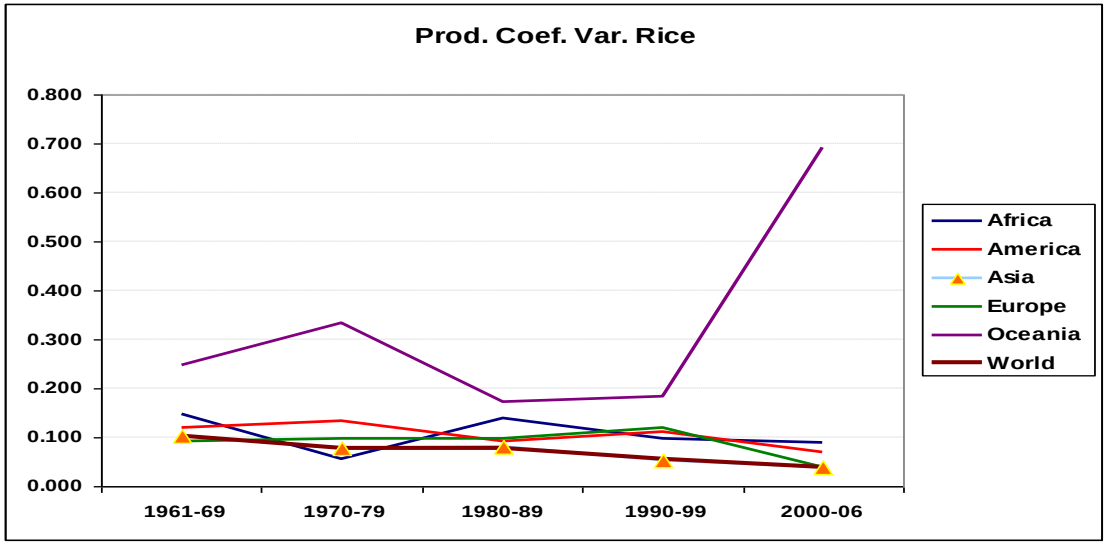
- Shocks to production
- Developments in global stocks
- Government short term trade related policies
- Petroleum price changes
- Developments in USD exchange rates
- Developments in financial markets and speculative fund positions
- Sudden changes in demand
- **Overall: new factors are likely to dominate. Considerable uncertainty and likely volatility. More spikes likely**

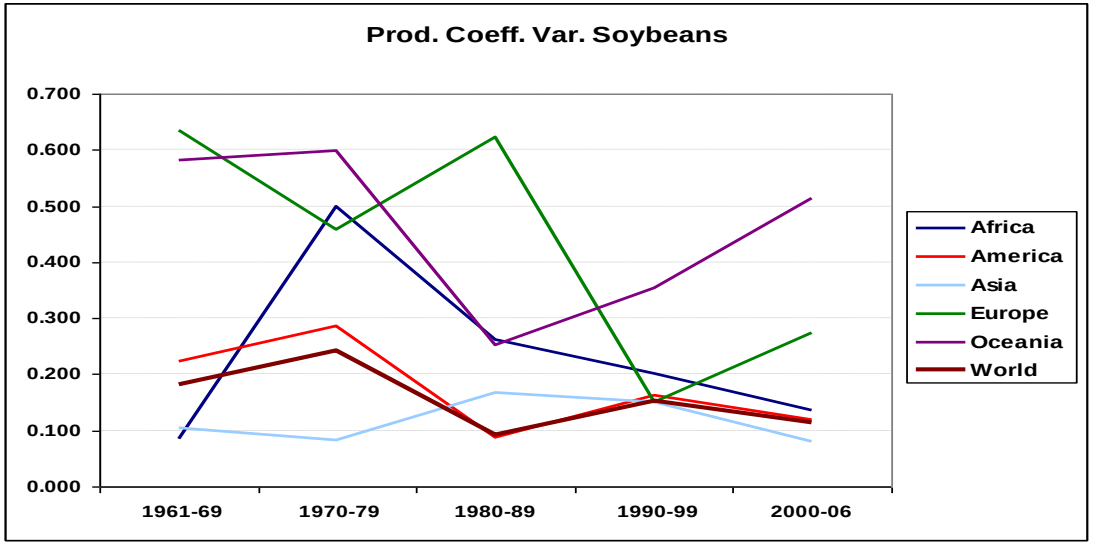
Production does not seem to have become more variable for wheat and maize



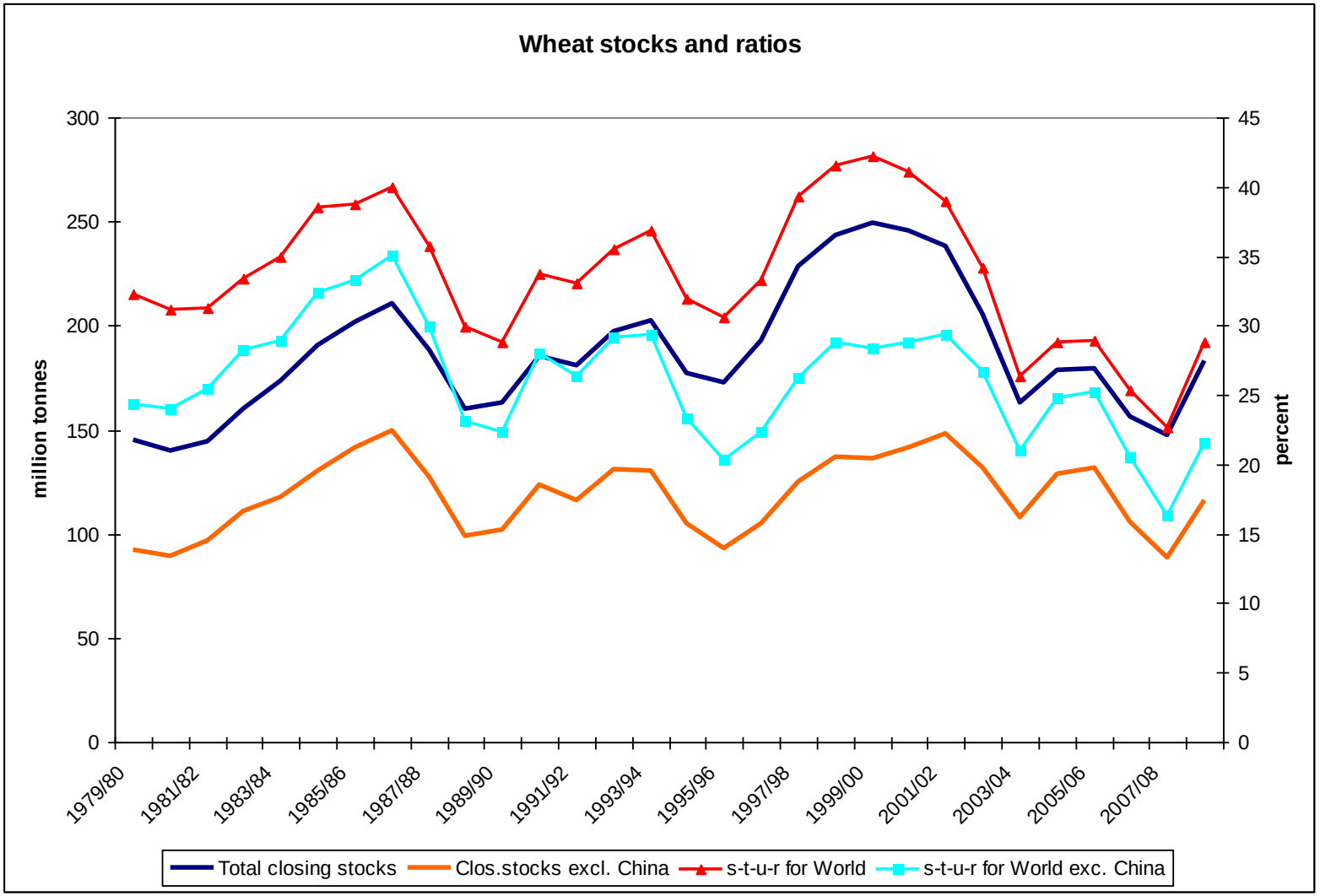


Production does not seem to have become more variable for rice and soybeans

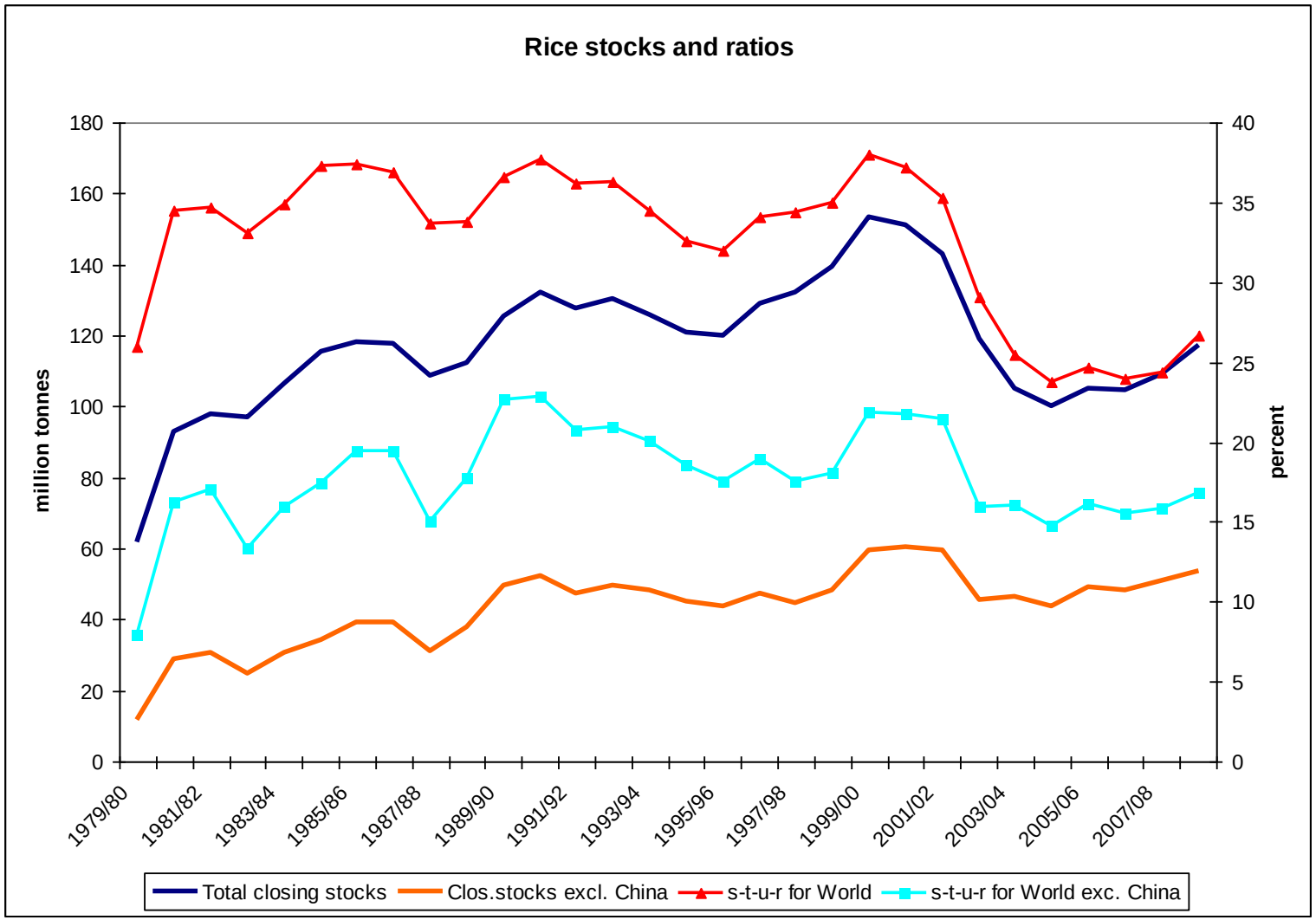




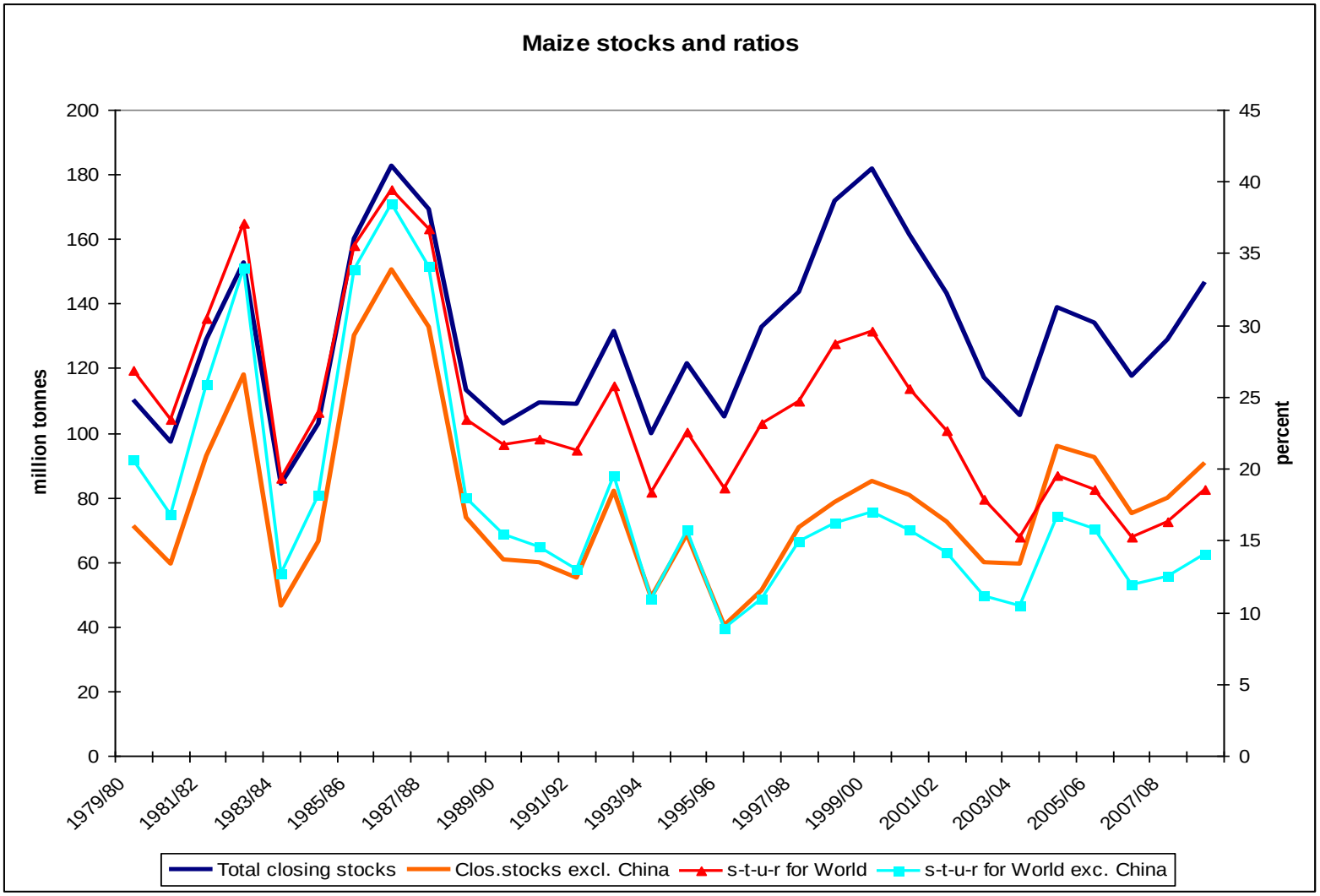
Global ending stocks of wheat and stock to utilization ratios for the whole world and for the world without China do not appear to have a long term negative trend



Global ending stocks of rice and stock to utilization ratios for the whole world and for the world without China

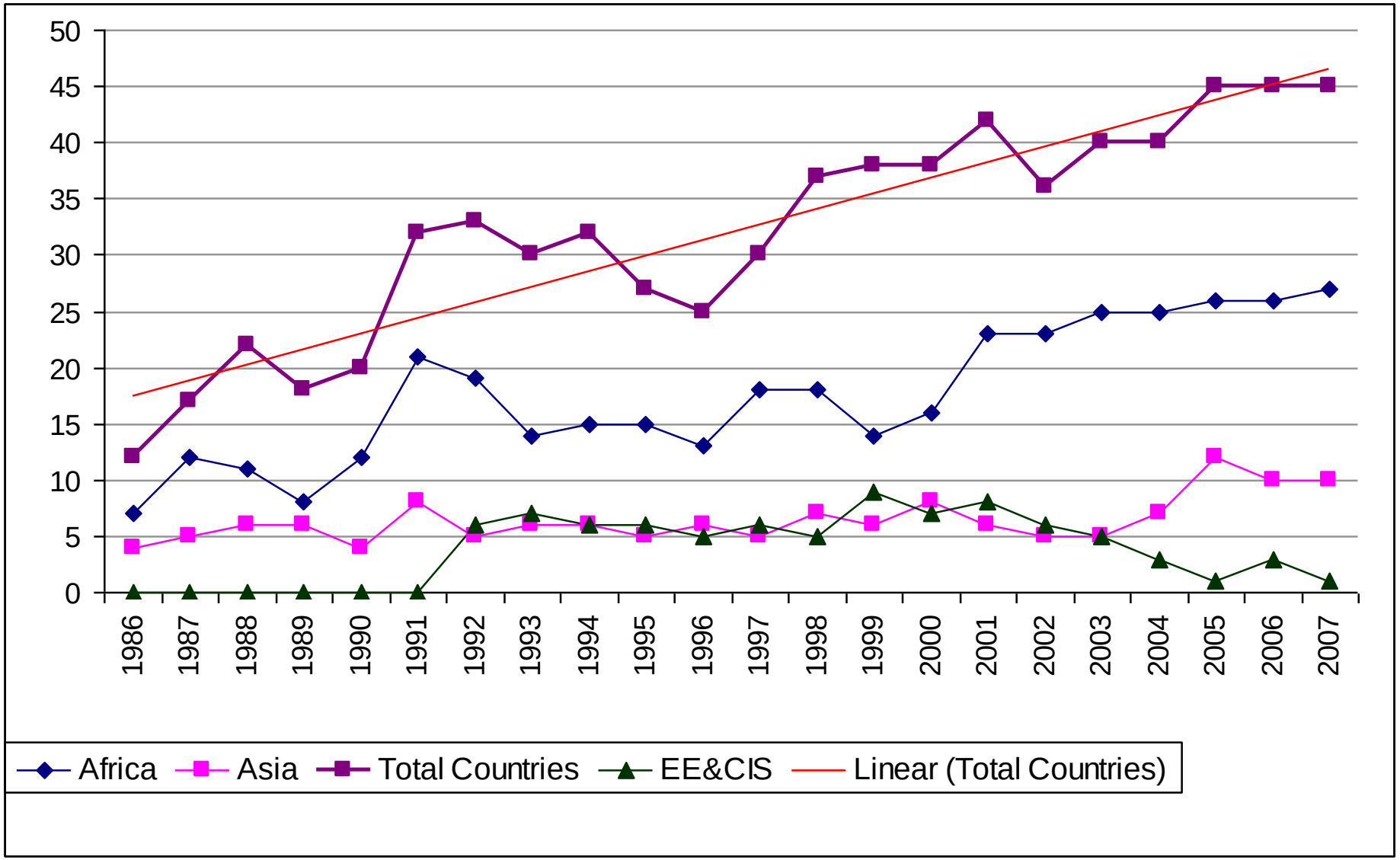


Global ending stocks of maize and stock to utilization ratios for the whole world and for the world without China do not appear to have a long term trend

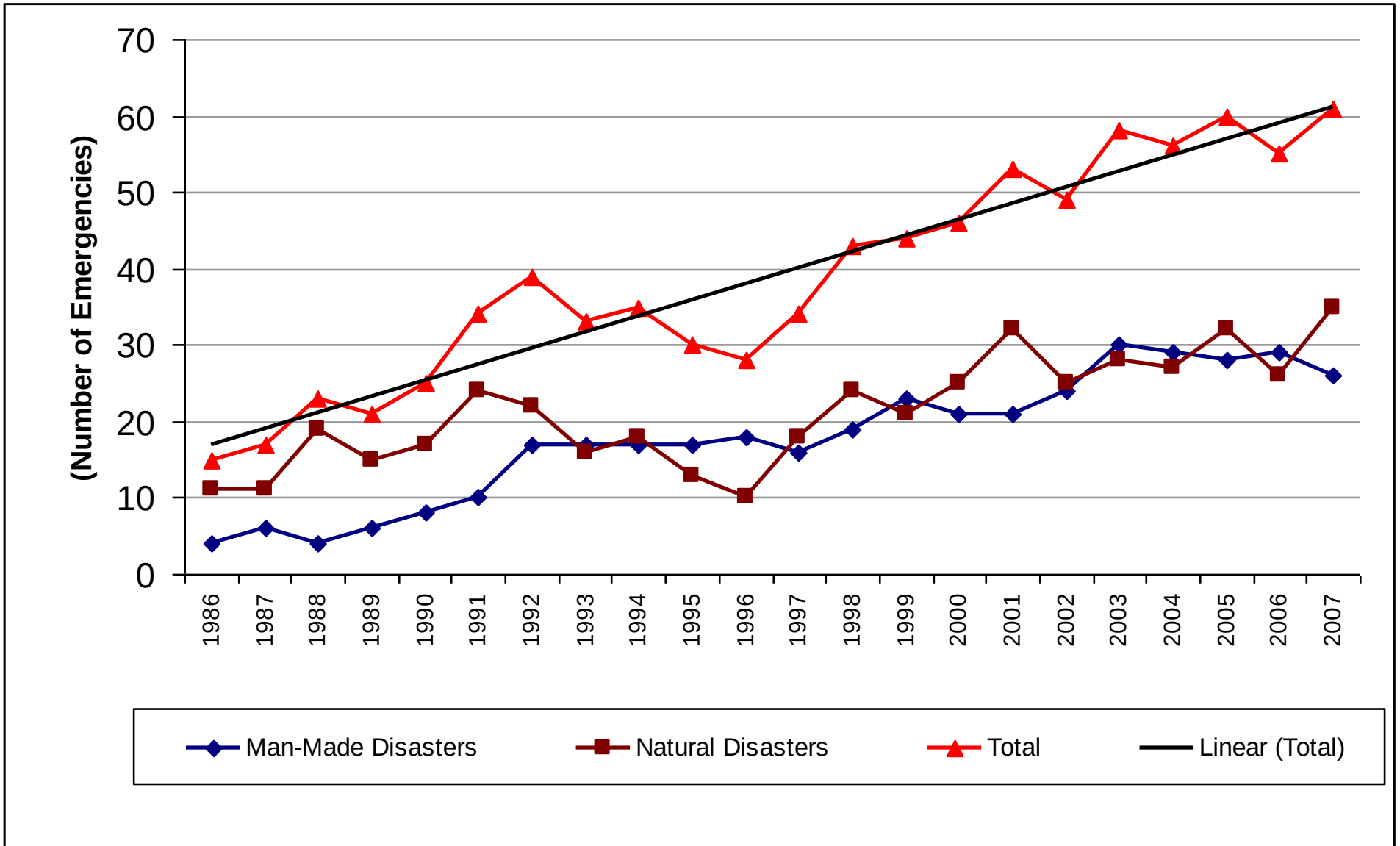


Climate Change and political instability may create more food market instability

No. of Countries facing food emergencies, 1986-2007



Trends in causes for food emergencies, 1986-2007



The global trade pattern has changed considerably among country groups in last 40 years for primary agricultural exports.

(LIC = Low Income Countries
MIC = Middle Income Countries
HIC = High Income Countries (WB definitions)

Export destination (Percent of exports of group in row to country group in column)

Average 1965-1967

	LIC	MIC	HIC	Total Exports (Mill $)
LIC	1.8	16.3	81.9	608
MIC	0.2	10.9	88.9	8149
HIC	1.0	13.6	85.4	14247
All Ctries	0.7	12.7	86.6	23004

Average 2004-2006

	LIC	MIC	HIC	Total Exports (Mill $)
LIC	9.5	42.8	47.7	22158
MIC	3.7	30.1	66.3	84490
HIC	2.5	23.9	73.6	137985
All Ctries	3.5	27.7	68.7	244633

The global trade pattern has changed considerably among country groups in last 40 years for processed food exports.

Export destination (Percent of exports of group in row to country group in column)

Average 1965-1967

	LIC	MIC	HIC	Total Exports (Mill $)
LIC	8.7	1.7	89.6	38
MIC	0.1	4.4	95.5	5242
HIC	0.1	4.7	95.2	6235
All Ctries	0.1	4.6	95.3	11515

Average 2004-2006

	LIC	MIC	HIC	Total Exports (Mill $)
LIC	2.8	31.8	65.4	111752
MIC	0.4	24.0	75.6	429099
HIC	0.8	19.8	79.3	469027
All Ctries	0.9	23.0	76.2	1009878

The global trade pattern has changed considerably among country groups in last 40 years for primary agricultural imports.

Primary agricultural products

Import origin (Percent of imports of country group in column from group in row)

Average 1965-1967

	LIC	MIC	HIC	All Ctries
LIC	6.6	3.4	2.5	2.6
MIC	9.0	30.3	36.4	35.4
HIC	84.5	66.3	61.1	61.9
Total imports (Mill $)	167	2923	19913	23004

Average 2004-2006

	LIC	MIC	HIC	All Ctries
LIC	24.4	14.0	6.3	9.1
MIC	36.0	37.4	33.3	34.5
HIC	39.6	48.6	60.4	56.4
Total imports (Mill $)	8616	67860	168157	244633

The global trade pattern has changed less dramatically among country groups in last 40 years for processed food imports.

Processed food products

Import origin (Percent of imports of country group in column from group in row)

Average 1965-1967

	LIC	MIC	HIC	All Ctries
LIC	27.8	0.1	0.3	0.3
MIC	36.1	44.0	45.6	45.5
HIC	36.1	55.9	54.1	54.1
Total imports (Mill $)	12	527	10976	11515

Average 2004-2006

	LIC	MIC	HIC	All Ctries
LIC	35.8	15.4	9.5	11.1
MIC	18.1	44.5	42.2	42.5
HIC	46.1	40.1	48.3	46.4
Total imports (Mill $)	8635	231788	769454	1009878

Developments in global food and agricultural sectors that will condition future trade policies

- Uneven growth in the global economy
- Growth in agricultural output and investment, especially foreign direct investment
- Continued reform towards decoupled support in developed countries
- Continued policy reform in developing countries
- Global volatility of prices and concerns about access to supplies and food security
- Continued concern for environmental impacts of agriculture
- Continued concentration and value chain development in the food system
- Consumer-driven food attributes and the rise of private standards
- The proliferation of regional and bilateral agreements
- Growing water scarcity and increased food emergencies due to climatic shocks

Problems of access to grain imports may become more accute

- Problem of price spikes is problem of confidence in international markets.
- Confidence erodes in every spike and creates tendencies for inward looking policies which may destabilize markets further.
- High grain prices induced speculative purchasing and hoarding by many agents, including importing countries.
- Many middle and high income regular net food importing countries, apart from higher food import bills, faced risks of lack of adequate supplies
- Many of these countries have low capacity for domestic production albeit capacity to finance imports
- Low income countries faced both rationing out of global supplies by richer countries as well as higher costs
- To achieve global and equitable food security need system to assure supplies to both types of countries

Assuring adequate grain supplies for world markets

- Promote "**production reserves"** instead of commodity reserves
- In several OECD countries policies have been instituted to set-aside land.
- Such policies are largely "decoupled", namely non-trade distorting, hence acceptable from a WTO perspective.
- Relevant policies, could include apart from support for land set asides, support for technology and farm human capital skills, incentives to maintain set-aside land in in environmentally sustainable condition, etc.
- Productive land set-aside could be brought into physical production in high income countries within 6-10 months (the recent supply response is evidence to that)

Appropriate policies for assuring grain market access by middle and high income net grain importing countries

- Investments in food production in other countries with commitments to buy back products
- Medium and long term arrangements with main exporters
- Managing import risks through derivative instruments reinsured in international reinsurance market

A system to assure bilateral and multilateral grain contracts

- Many middle and high income Net Grain Importing countries are interested in medium and long term supply contracts to assure domestic grain supplies apart from regular short term contracts
- How can such contracts be enforced?
- Some countries have turned to land investment deals, to assure supplies, but even these face sovereign types of risks
- Basic missing institution is an international clearing house type of arrangement similar to the clearing houses that are integral parts of the organized commodity exchanges, which ensure that all contracts are executed
- Can an international clearing type of mechanism be envisioned to ensure the performance of these long term contracts?

Components of a possible International Grain Clearing Arrangement (IGCA) (1)

- Basic objective: To guarantee performance of short, medium and long term grain trade contracts between countries or private entities
- Basic idea: Both contracting parties (buyer and seller) would post a "good faith margin" amount to the IGCA for the duration of the contract and for a small share of the envisioned annual cost (5 percent?)
- The amount posted as margins, if not procured by the countries or private agents themselves, could be borrowed from international banks or other multilateral financial institutions, which could be the Trustees and owners of the IGCA, hence real cost would be foregone interest on margins
- The IGCA, in order to guarantee that physical supplies are available to execute the contracts, would invest its financial margin reserves in grain commodity reserves, in the form of either stocks of grain in given locations of excess supplies, or in the form of futures contracts in relevant organized exchanges (difference from existing clearing houses).
- The commitments in futures of the IGCA would be liquidated once the actual deliveries of the relevant contract would be executed.

Components of a possible International Grain Clearing Arrangement (IGCA) (2)

- The IGCA would guarantee the execution of contracts by pooling several such short, medium term and long term contracts and hence ensuring that there would be liquidity as well as physical reserves to honor individual contracts in case of non-performance by a participant
- The financial institutions that would be Trustees of the IGCA could provide additional sovereign insurance to the parties involved
- The IGCA could spread the risk of non-performance by holding its commodity reserves in several geographic locations, as well as several organized exchanges.

A system to ensure food imports in low income countries net grain importing countries through a dedicated Food Import Financing Facility

- The major problem faced by LDCs and NFIDCs during periods of food import needs in excess of normal commercial imports, is import financing for both private as well as parastatal entities
- Major reason for this is exposure limits of exporting country private trade financing banks to various developing countries
- Need system that can provide guarantees to trade financing banks to increase temporarily their exposure limits to grain importing countries

Basic rationale and concept of a FIFF

- **Purpose**: To allow LDCs and NFIDCs to finance commercial food imports in periods of excess import bills
- **Problem to be dealt with**: Credit and financing exposure ceilings from developed country financing institutions to LDCs and NFIDCs
- **Concept**: Provide additional finance for commercial food imports in excess of normal commercial food imports. In other words increase risk bearing capacity of financial institutions financing food imports
- **How**: By inducing increases in credit ceilings and country exposures under specific conditions, via a credible mechanism of intermediation

The basic structure of the Food Import Financing Facility (FIFF)

- Ex-ante (i.e. before onset of marketing year) availability of extra finance, based on estimates of excess food import bills
- Financing, or guarantees for finance above normal credit line ceilings, availed at normal commercial terms. No subsidies, no conditionalities
- Excess finance made available to financial institutions of eligible LDCs and NFIDCs (not directly to governments or traders). Domestic financial institutions will deal with local food import traders.
- FIFF would interpose itself between financial institutions in food exporting countries and financial institutions in eligible food importing countries.
- FIFF will supplement and augment the existing export financing mechanisms in developed food exporting countries.

Trigger conditions

- High international food prices
- Domestic production shortfalls
- Excess food import finance possibility made known and available on basis of estimates of excess food import bills, in advance of marketing year
- Estimates of excess food import bills will be based on estimates of international prices, domestic production, and imports, by reliable credible institutions.

Advantages of FIFF

- No need for new international institution. Facility can operate as part of existing IFI
- Ex-ante mechanism, not ex-post
- No conditionalities for finance
- Low interest rates, due to lower cost of intermediation
- Risk pooling of food import risks across many LDCs and NFIDCs
- Specialized knowledge of food import finance and relevant risk management
- Low interest rates of excess food import finance
- Considerable leveraging of funds (with small yearly costs total finance extended can be many times that)
- Multilateral export credit guarantee mechanism for food exports.
- Low risks due to sophisticated risk management, hence low cost (a small share of total financing extended)
- Could be adapted and extended to serve more purposes, such as a special concessionary window

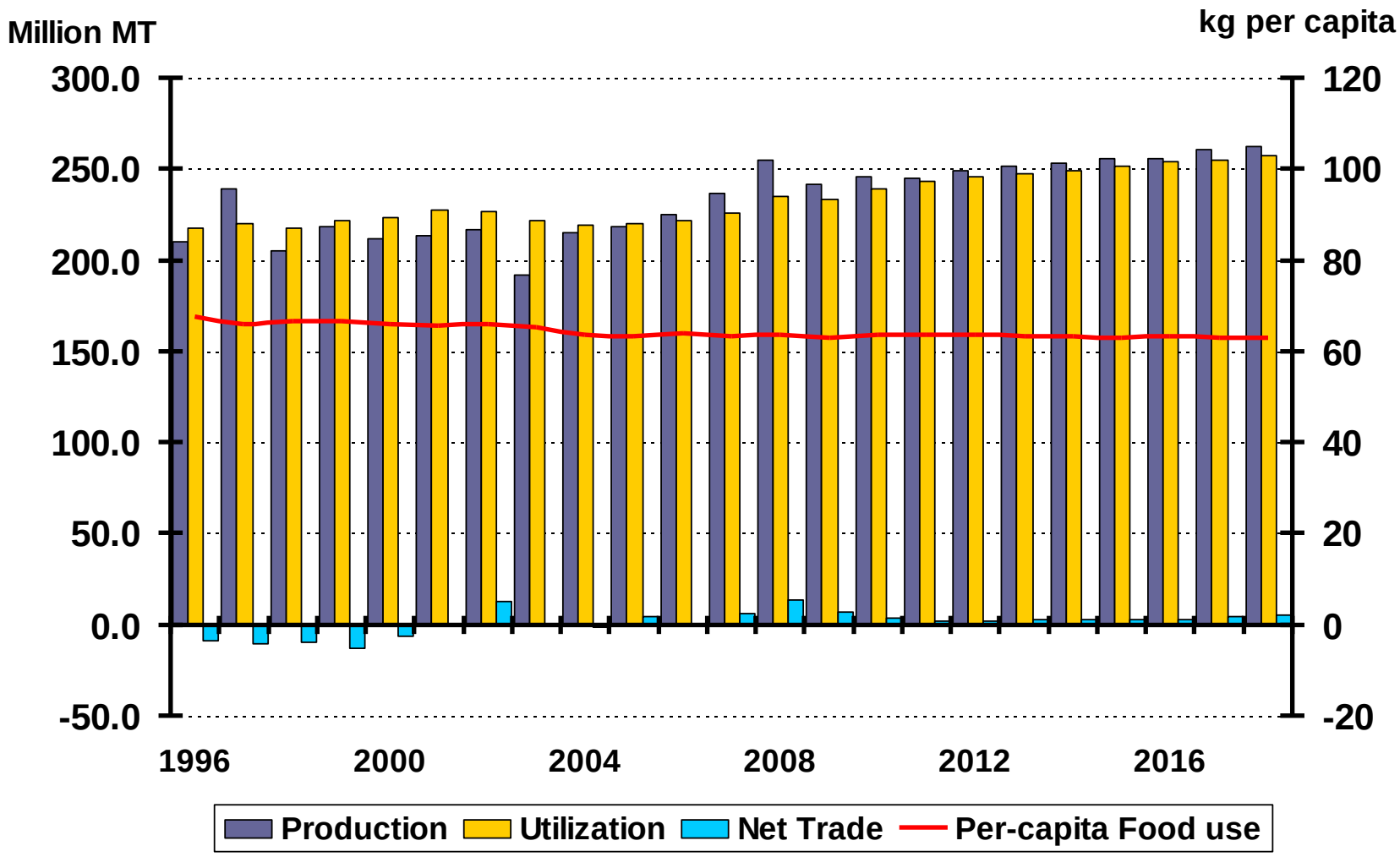
Synergies between an IGCA and a FIFF

- Both are financial mechanisms hence no reason they could not be combined under one institutional arrangement
- Both deal with existing real international grain and other basic food market failure problems and do not change market fundamentals, as most commodity reserve schemes aim at.
- They both do not disturb the efficiencies of private sector trade
- Opportunity to make them part of a new international regulatory regime for basic food commodities in light of the recent food market surge and the current financial crisis

THANK YOU

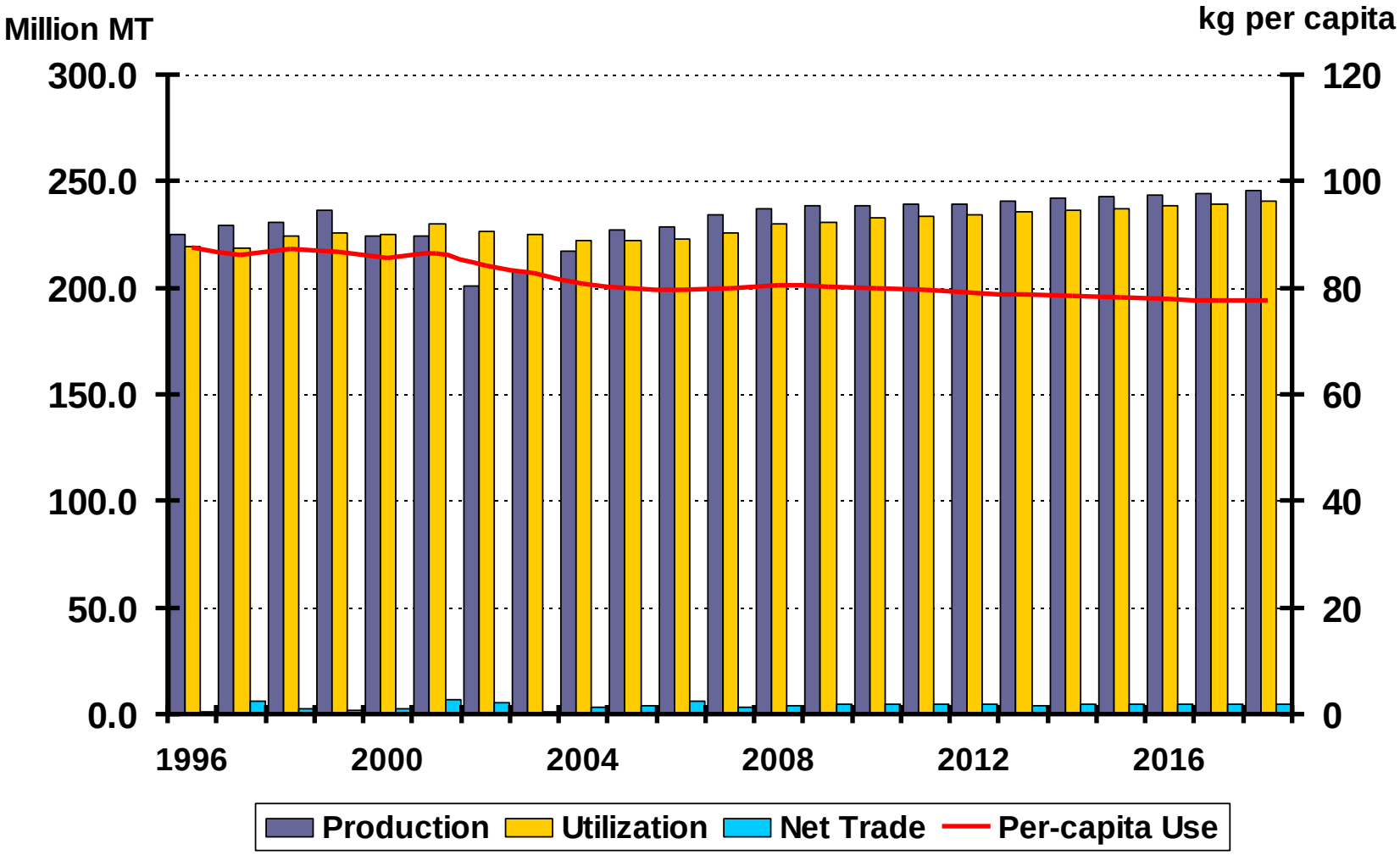
Brazil/Russia/India/China – Wheat

Production, Utilization, Net Trade and Per-capita Food use



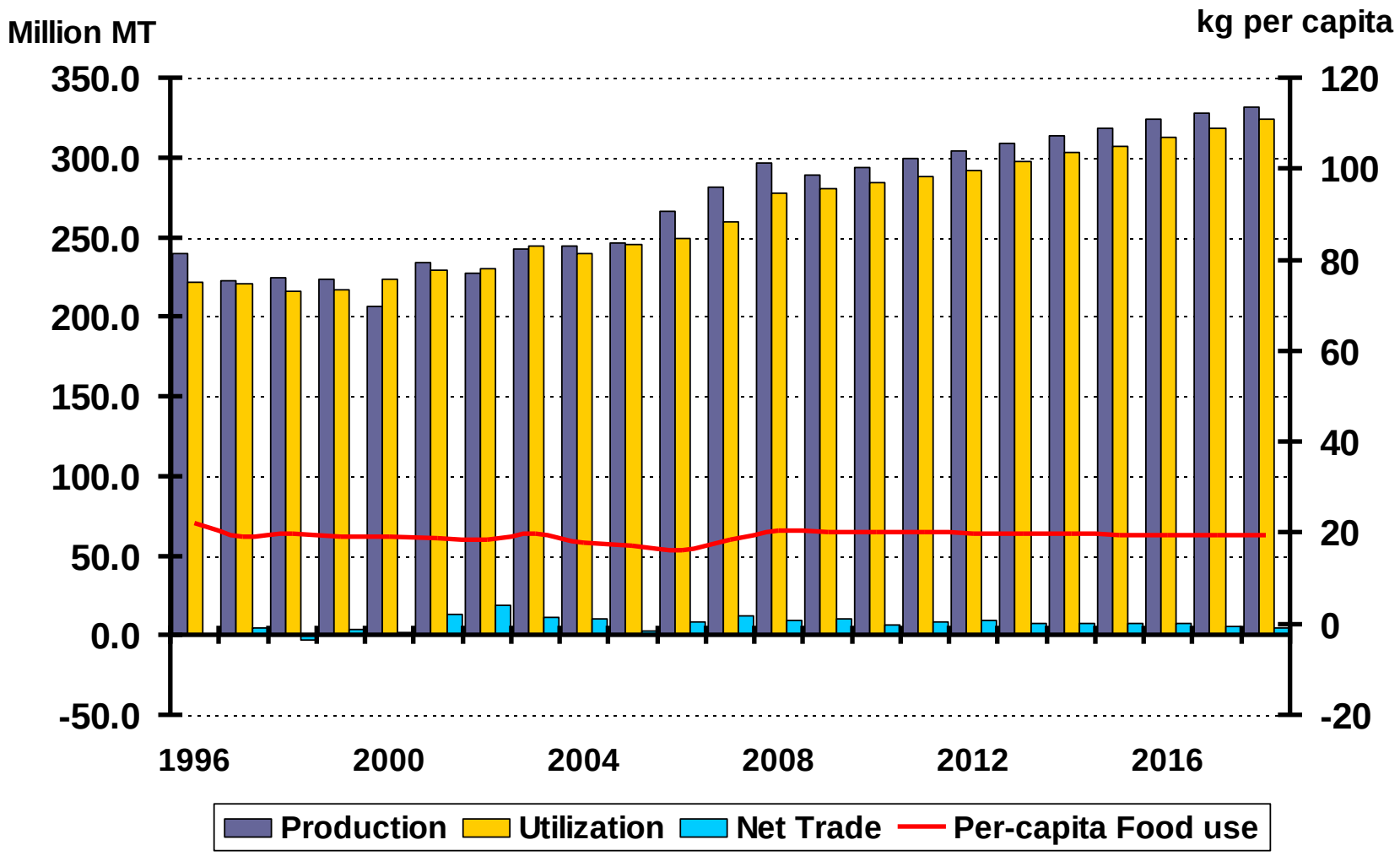
Brazil/Russia/India/China – Rice

Production, Utilization, Net Trade and Per-capita Use

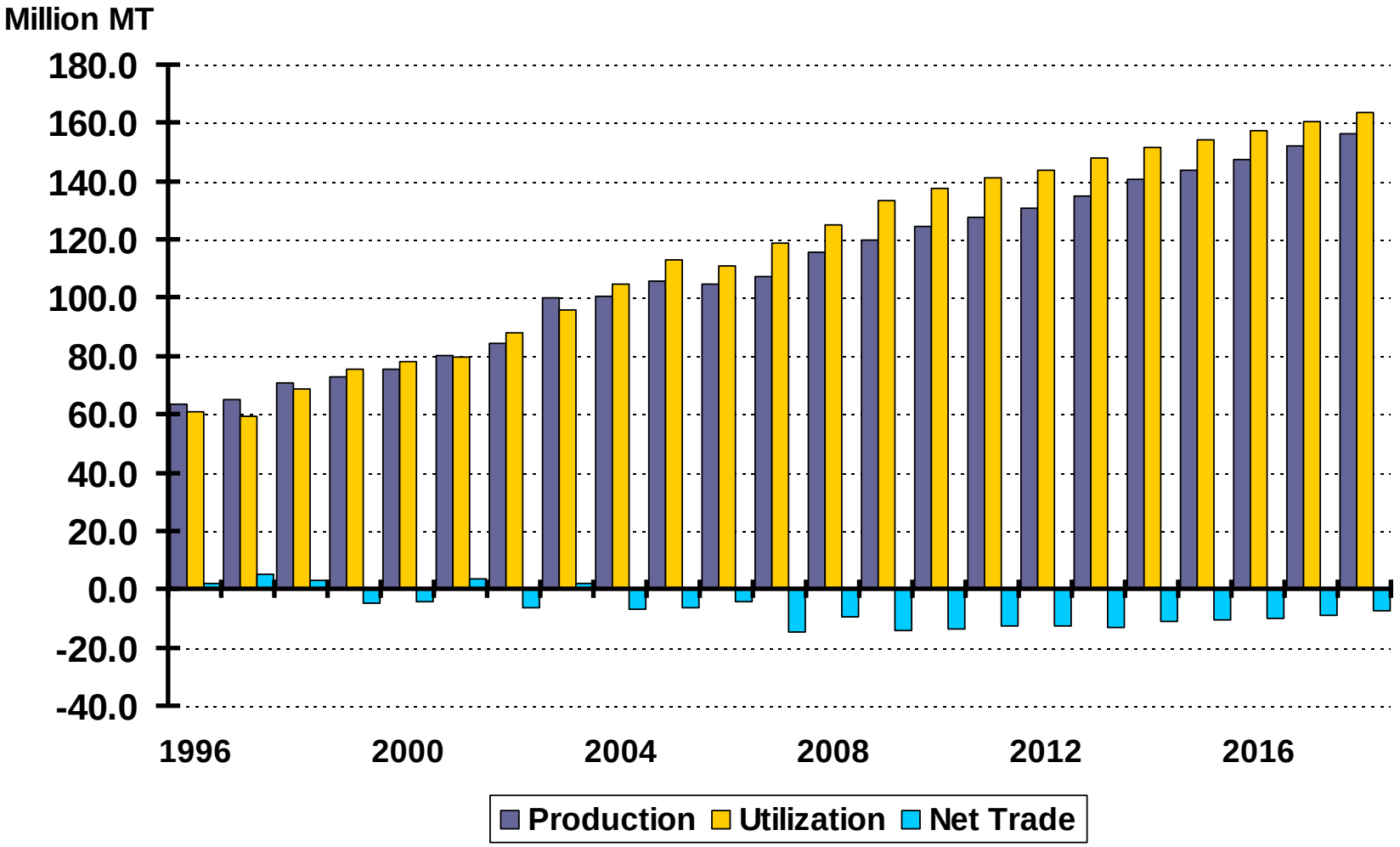


Brazil/Russia/India/China – Coarse Grain

Production, Utilization, Net Trade and Per-capita Food use

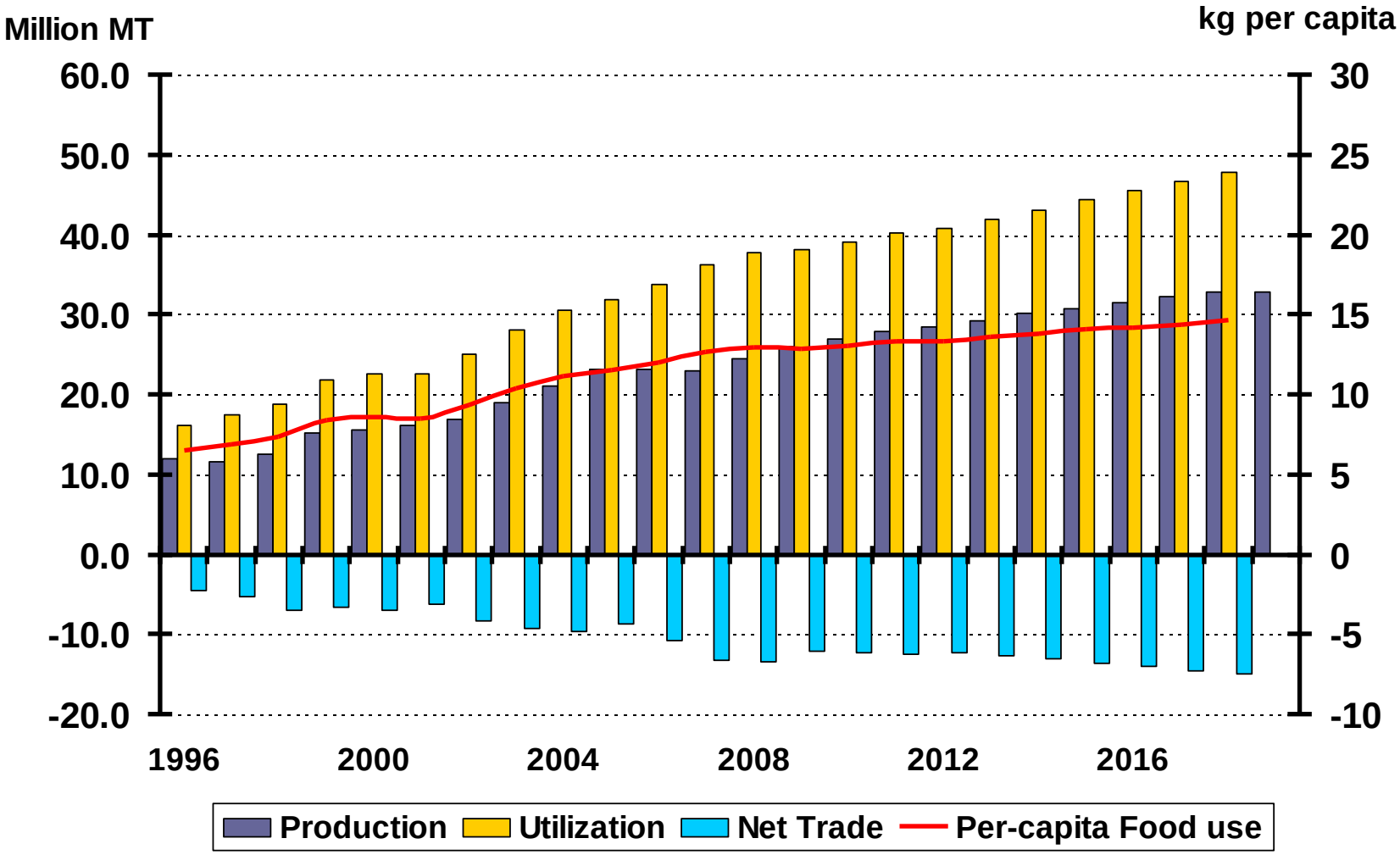


Brazil/Russia/India/China – Oilseeds
Production, Utilization and Net trade



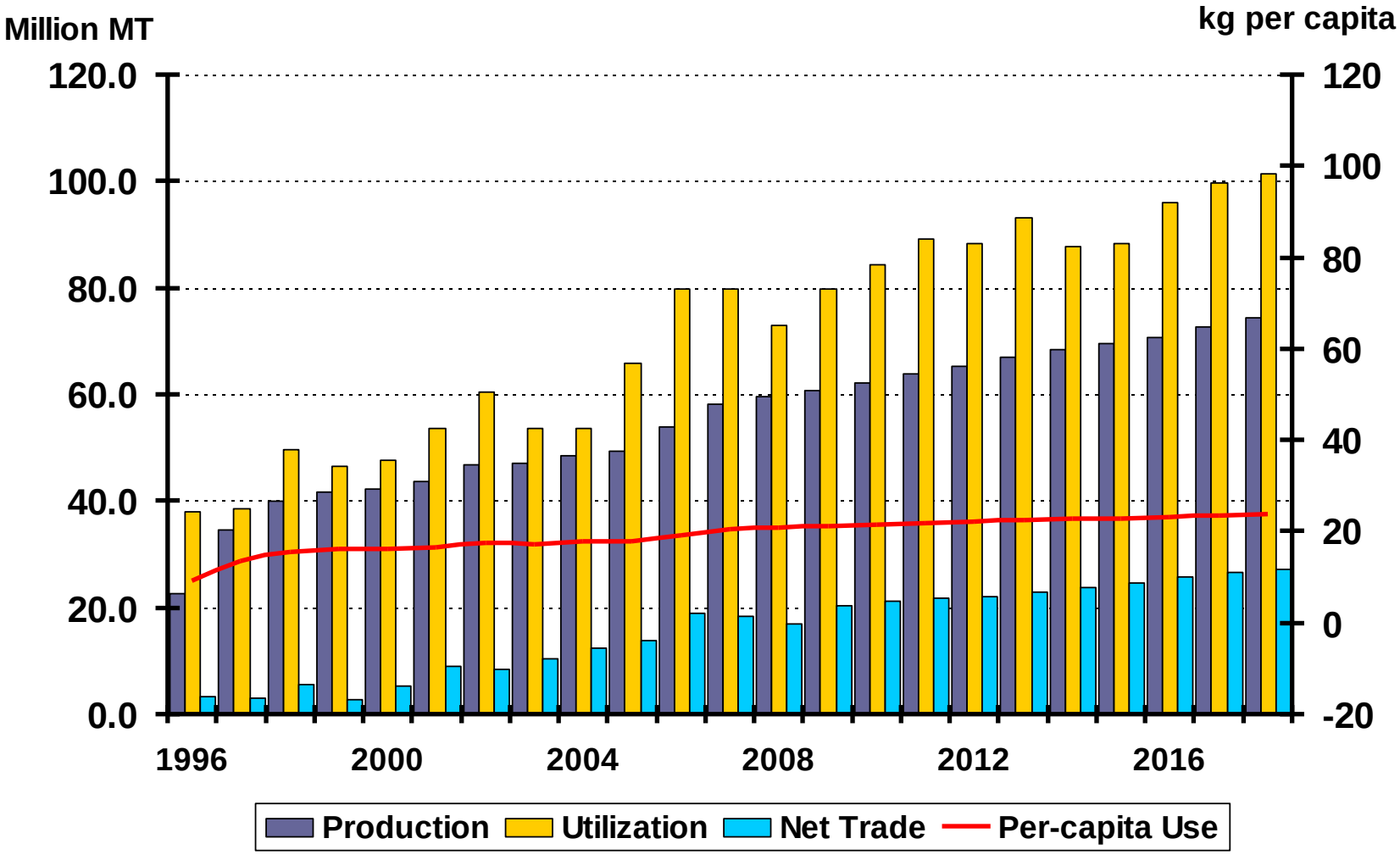
Brazil/Russia/India/China – Vegetable Oil

Production, Utilization, Net Trade and Per-capita Food use



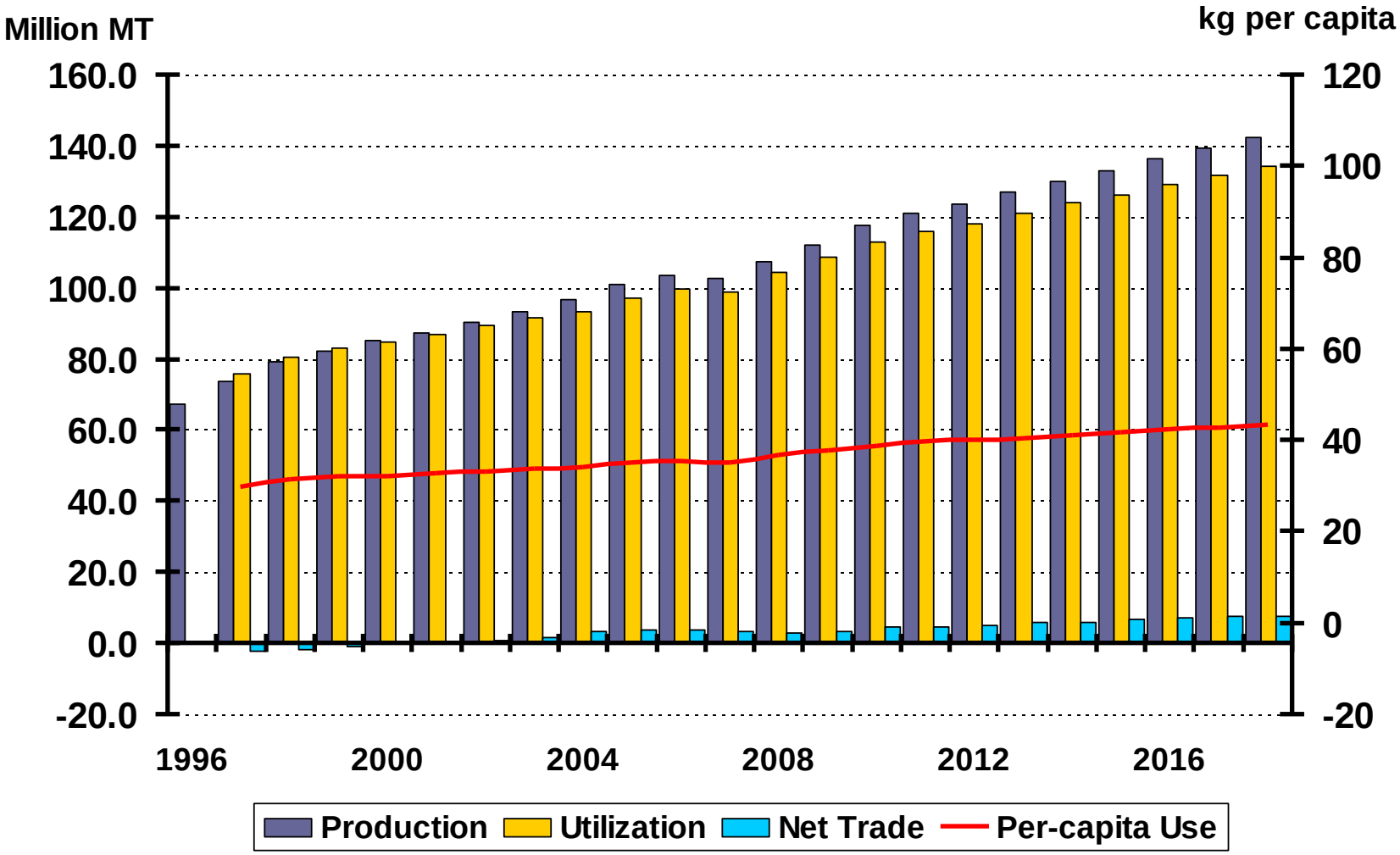
Brazil/Russia/India/China – Sugar

Production, Utilization, Net Trade and Per-capita Use



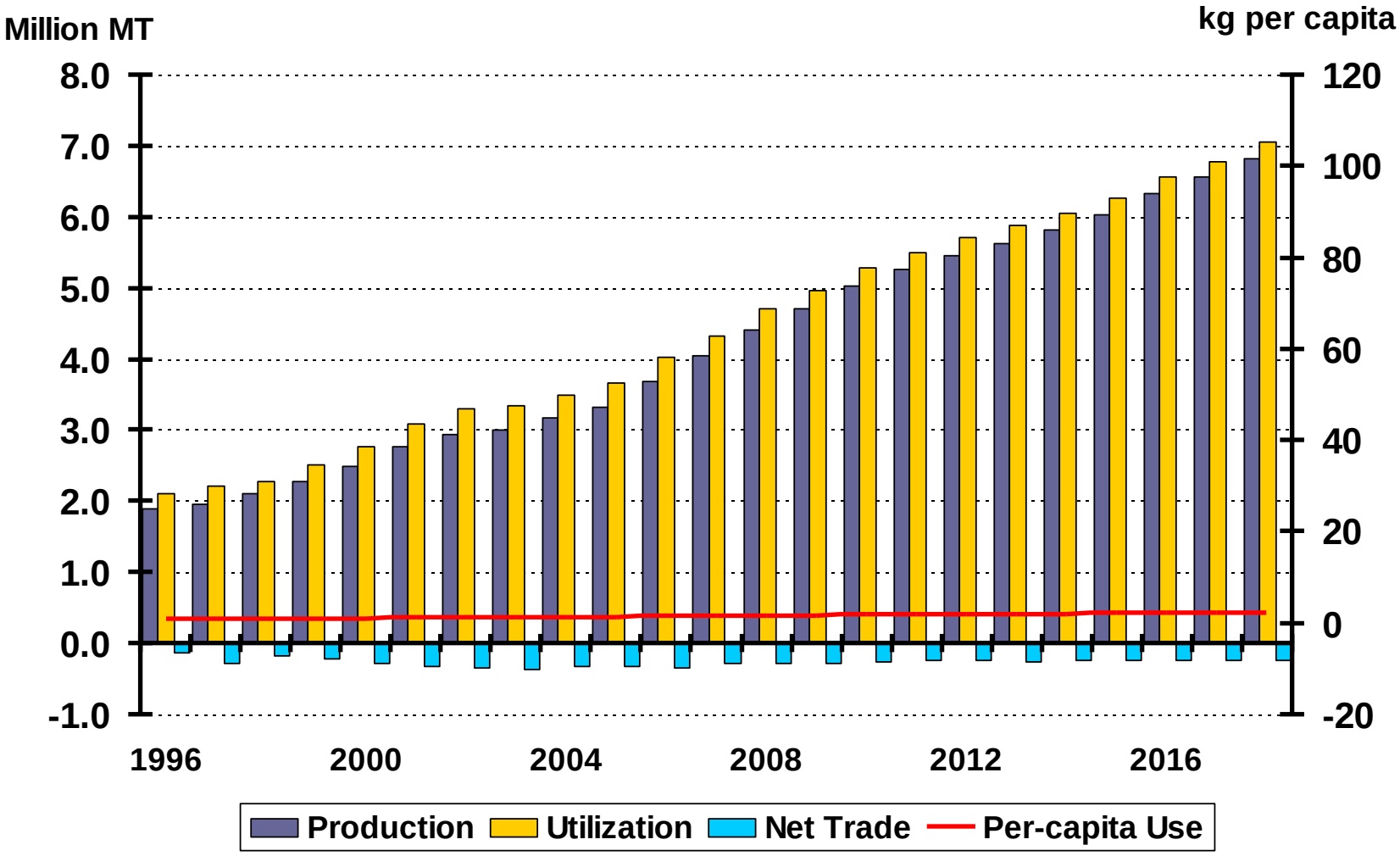
Brazil/Russia/India/China – Meat

Production, Utilization, Net Trade and Per-capita Use



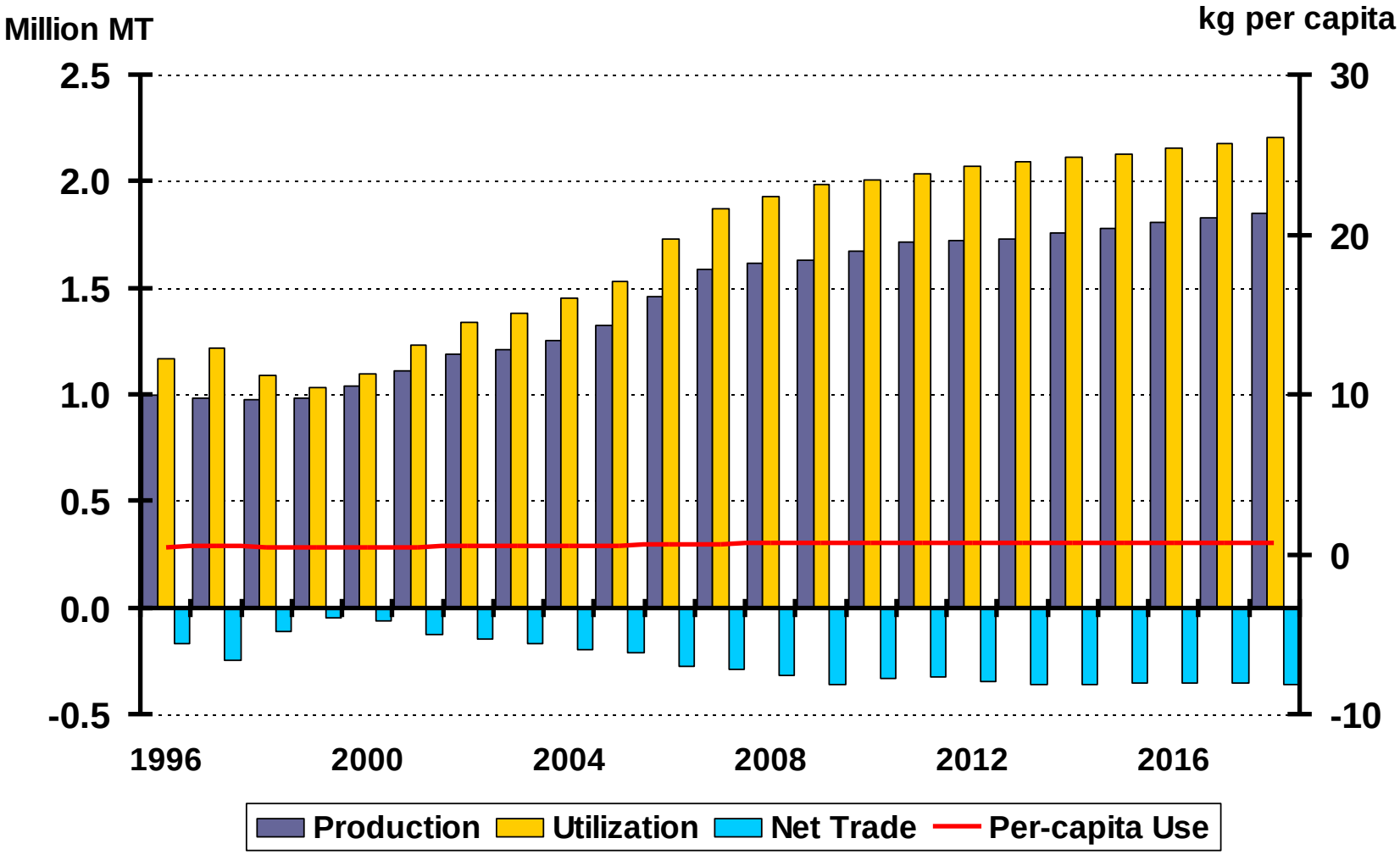
Brazil/Russia/India/China – Butter

Production, Utilization, Net Trade and Per-capita Use



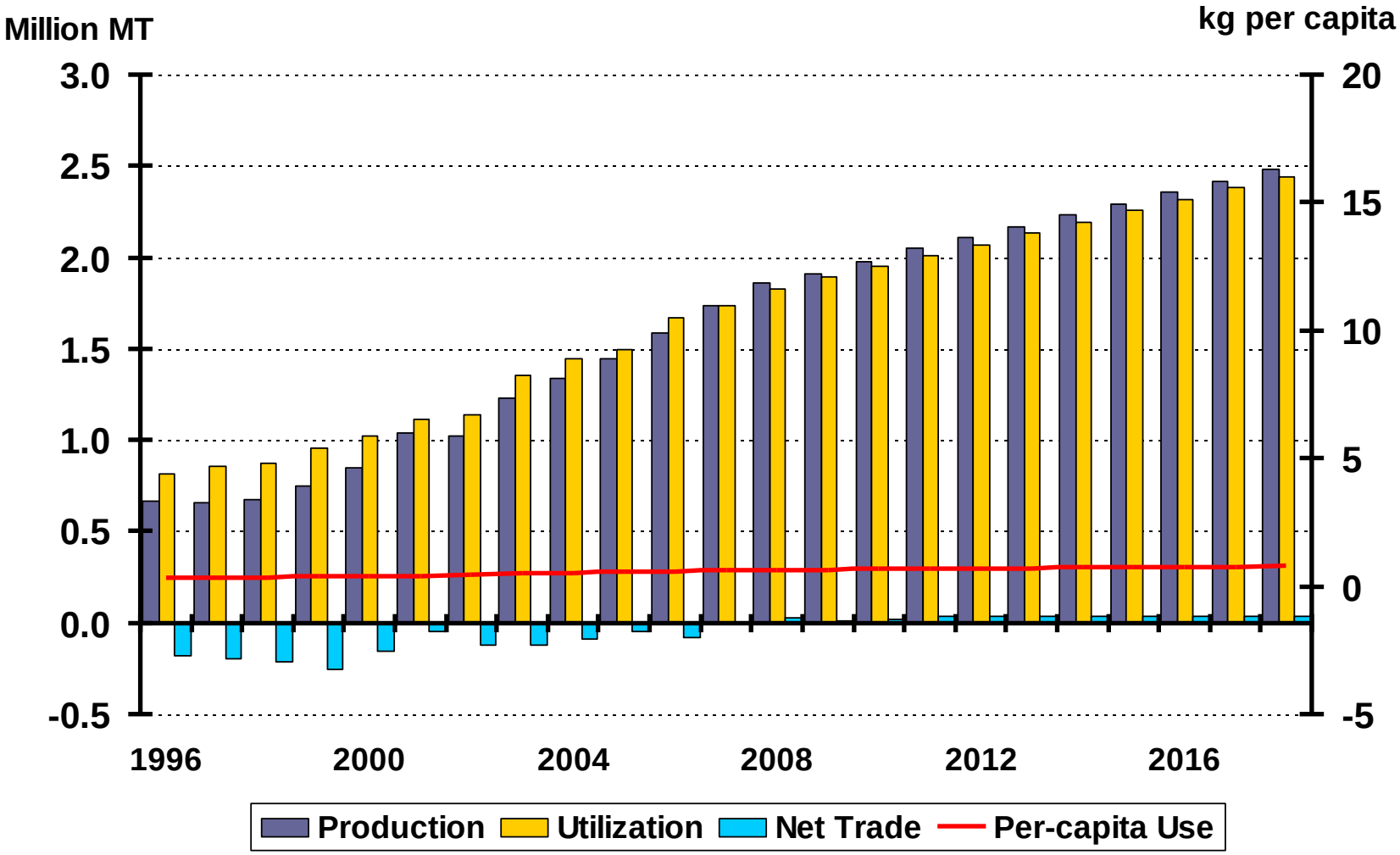
Brazil/Russia/India/China – Cheese

Production, Utilization, Net Trade and Per-capita Use

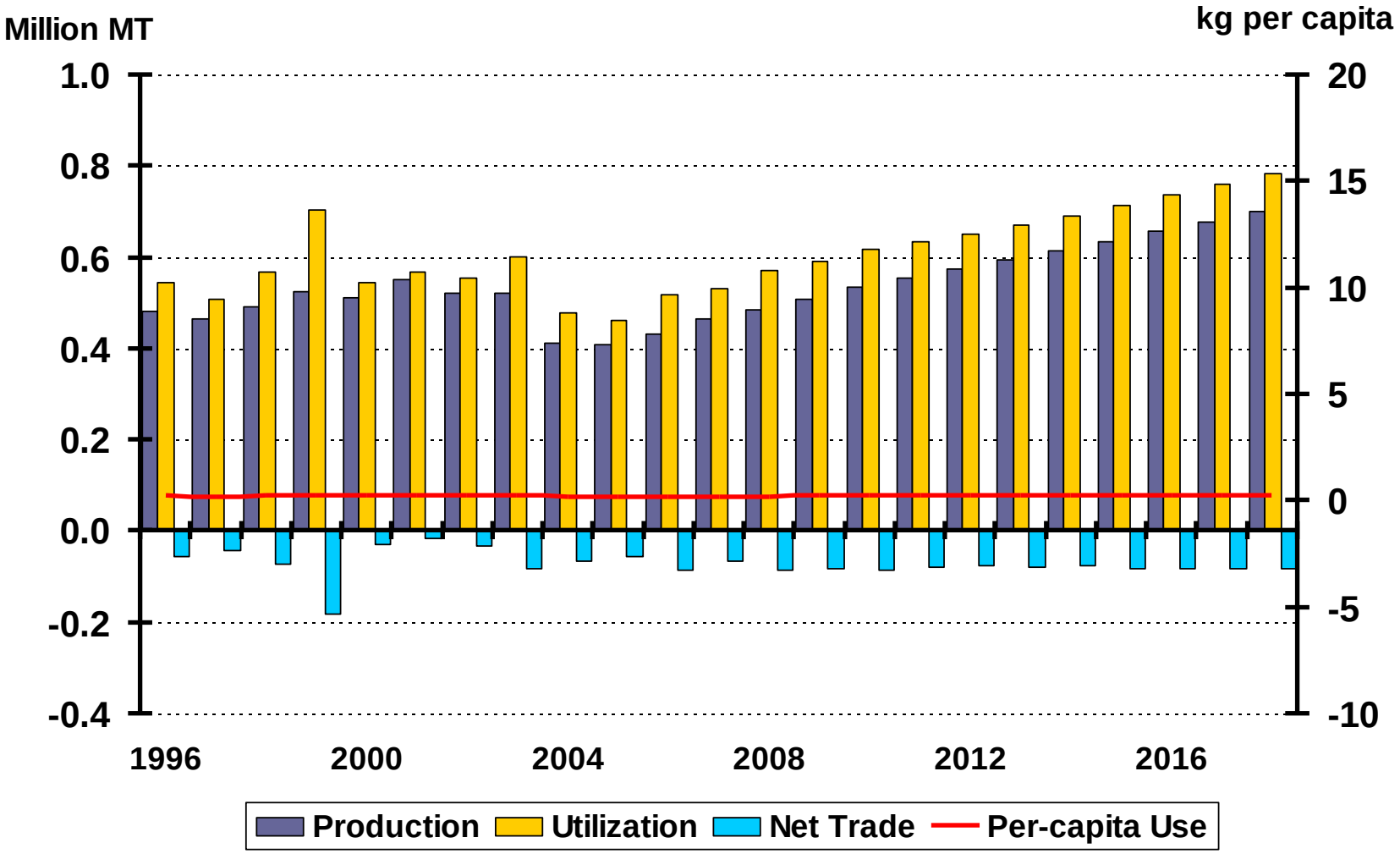


Brazil/Russia/India/China – Whole milk powder

Production, Utilization, Net Trade and Per-capita Use

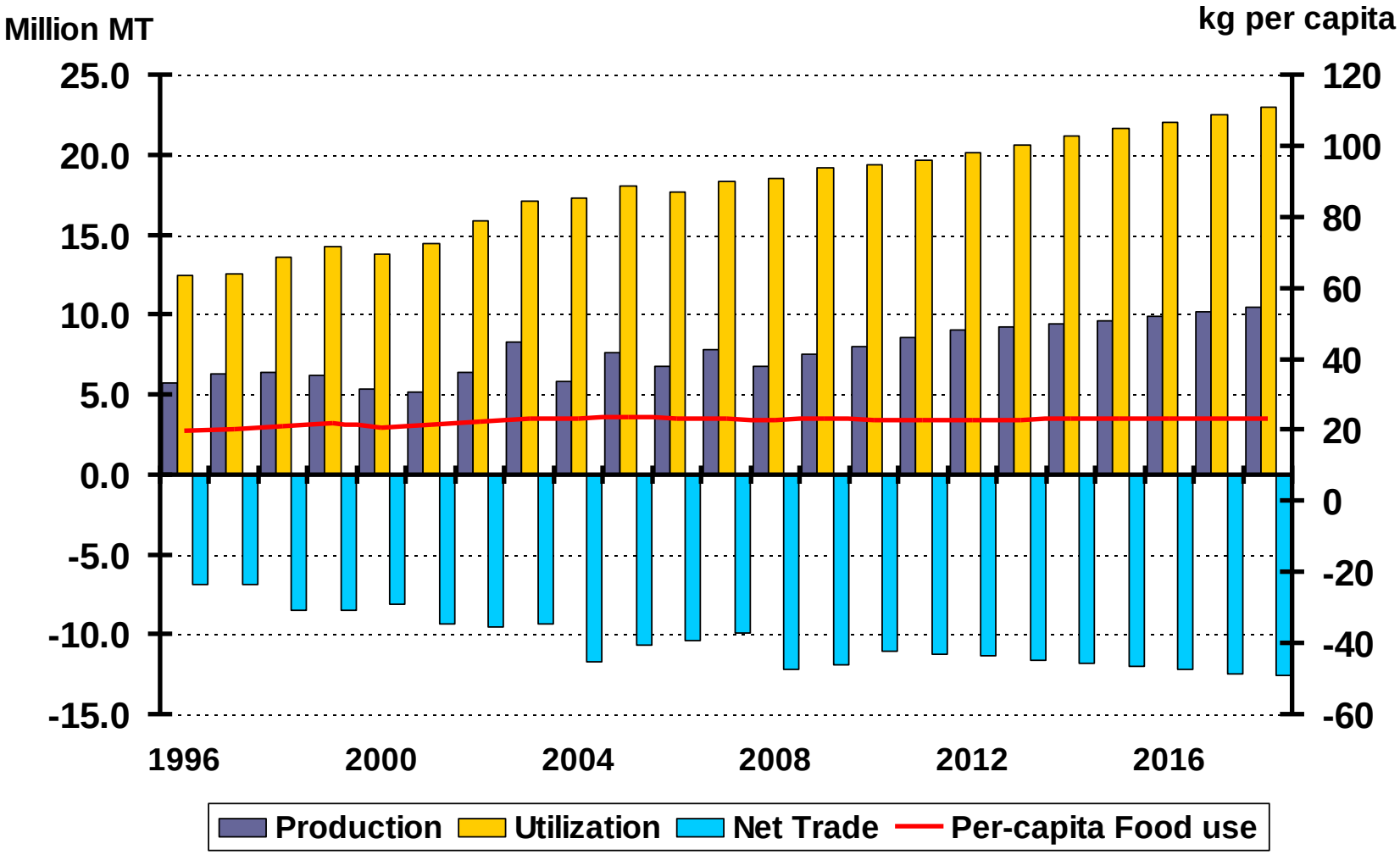


Brazil/Russia/India/China – Skim milk powder
Production, Utilization, Net Trade and Per-capita Use



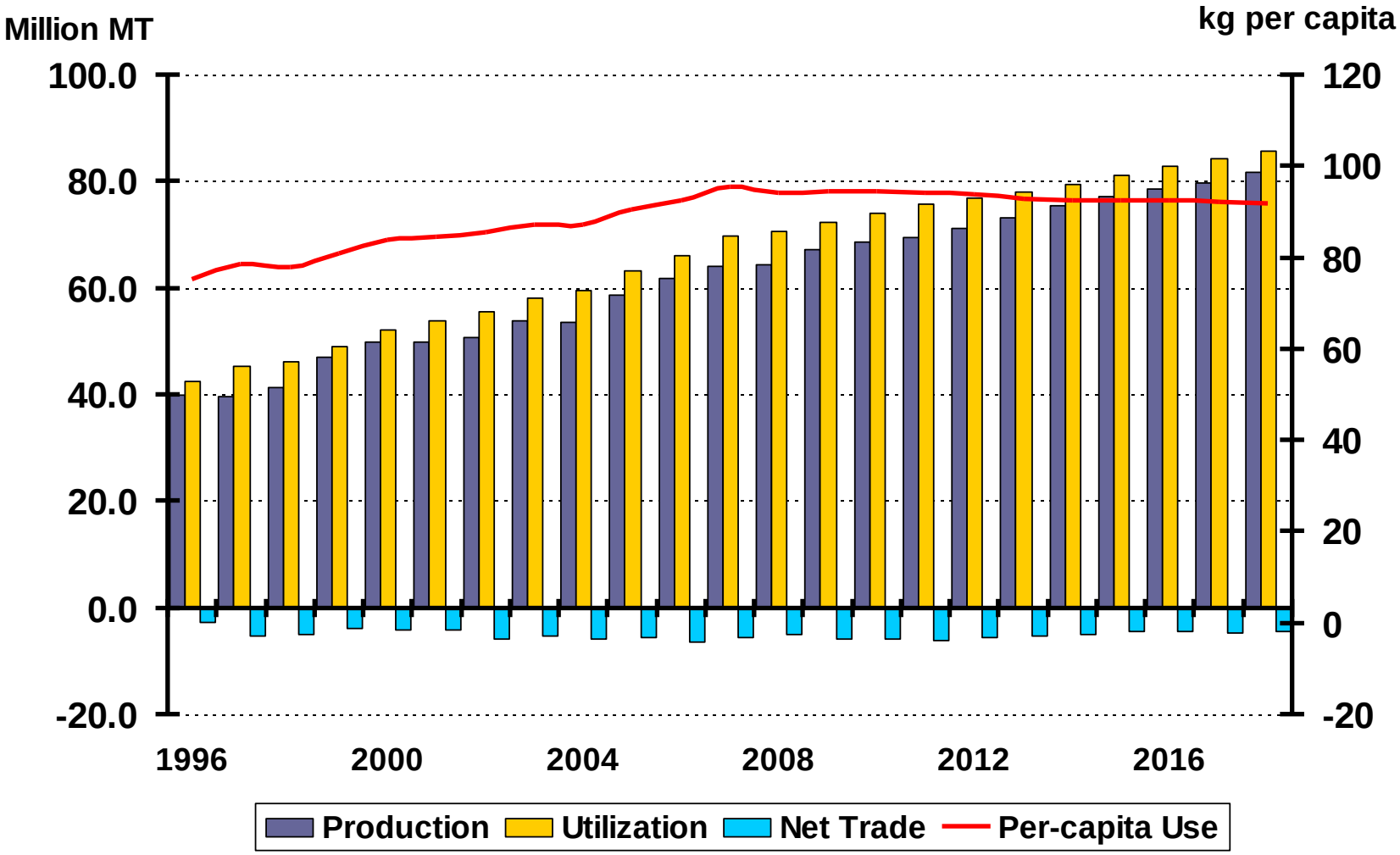
Least developed countries – Wheat

Production, Utilization, Net Trade and Per-capita Food use



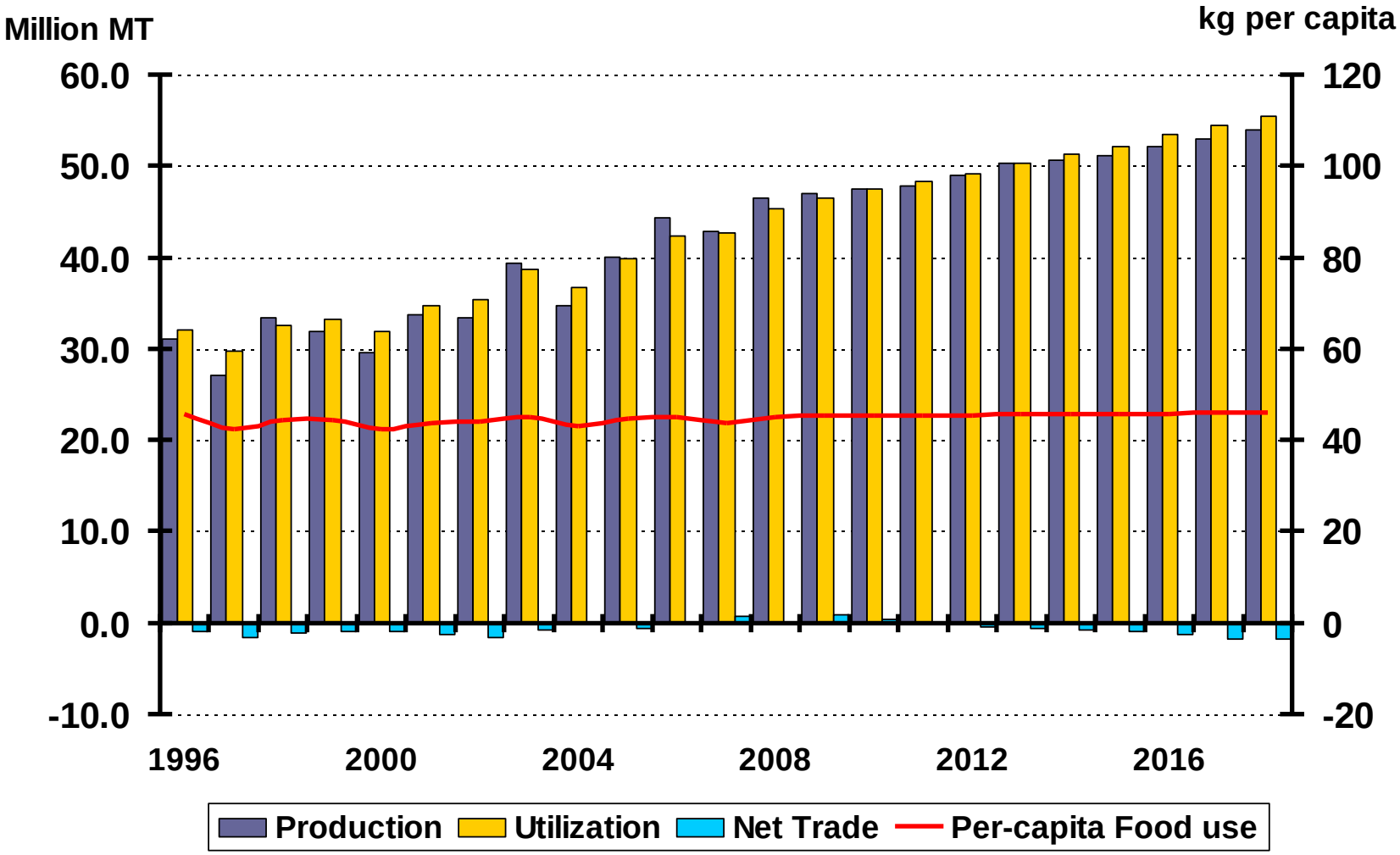
Least developed countries – Rice

Production, Utilization, Net Trade and Per-capita Use

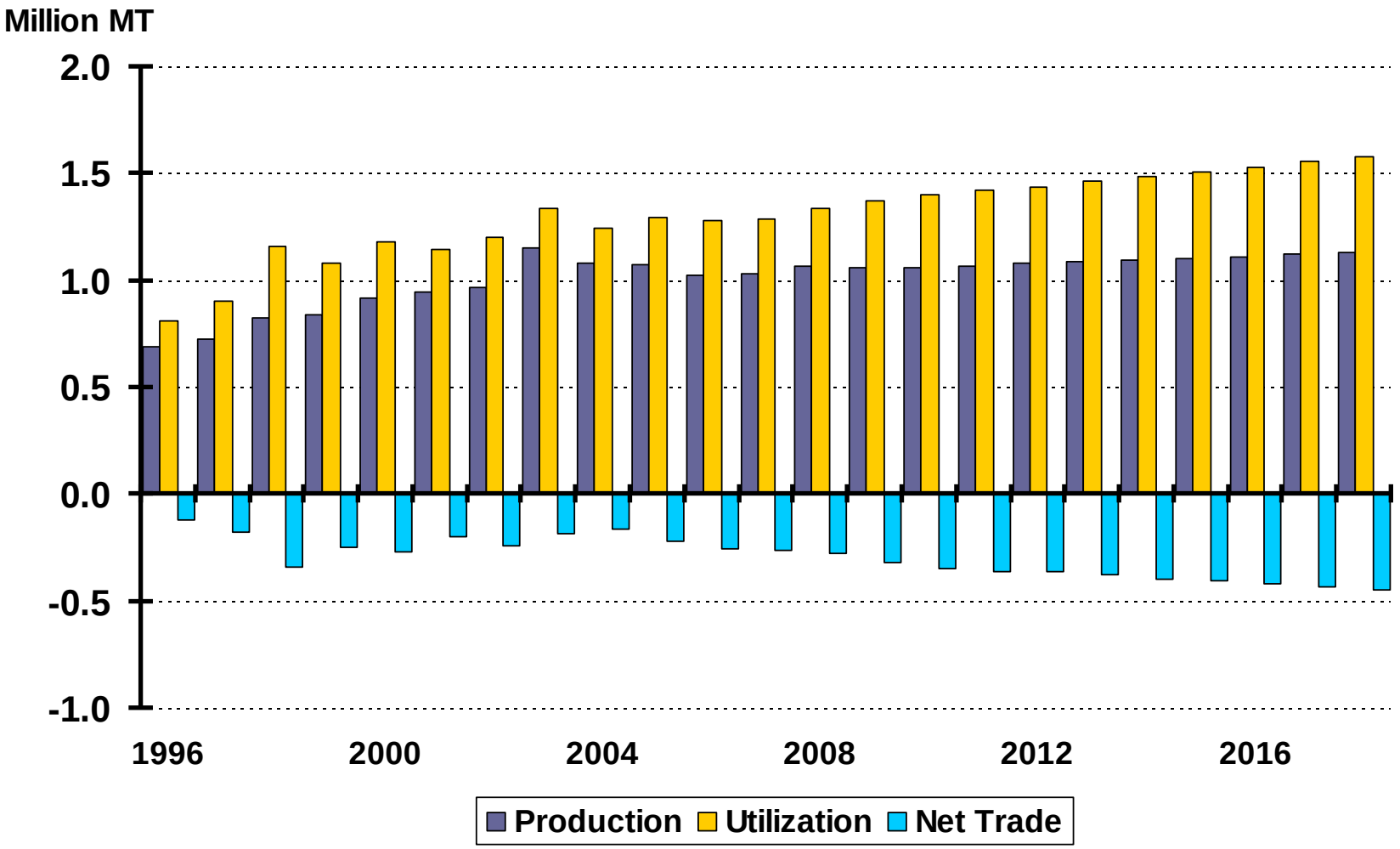


Least developed countries – Coarse Grain

Production, Utilization, Net Trade and Per-capita Food use

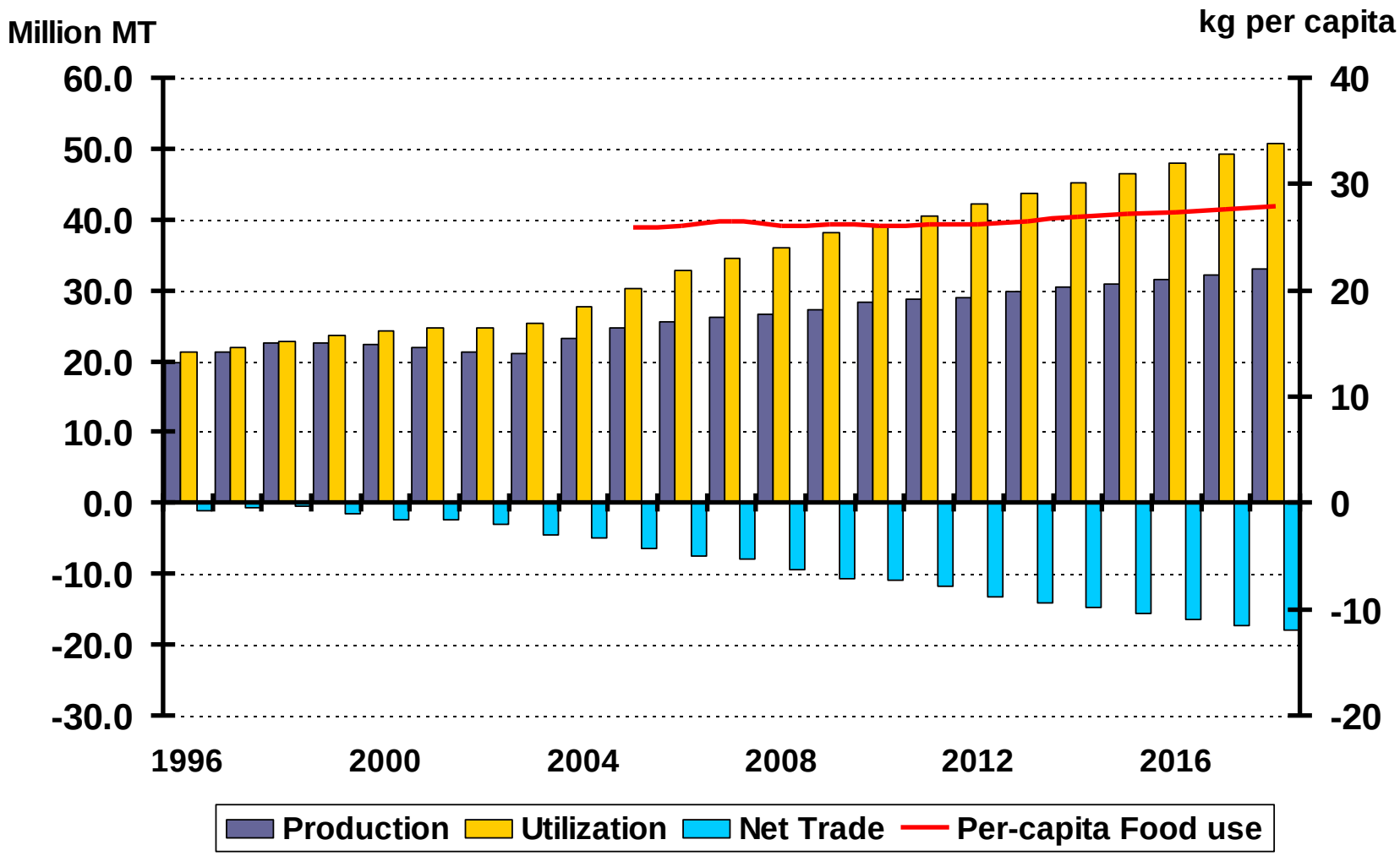


Least developed countries – Oilseeds
Production, Utilization and Net Trade



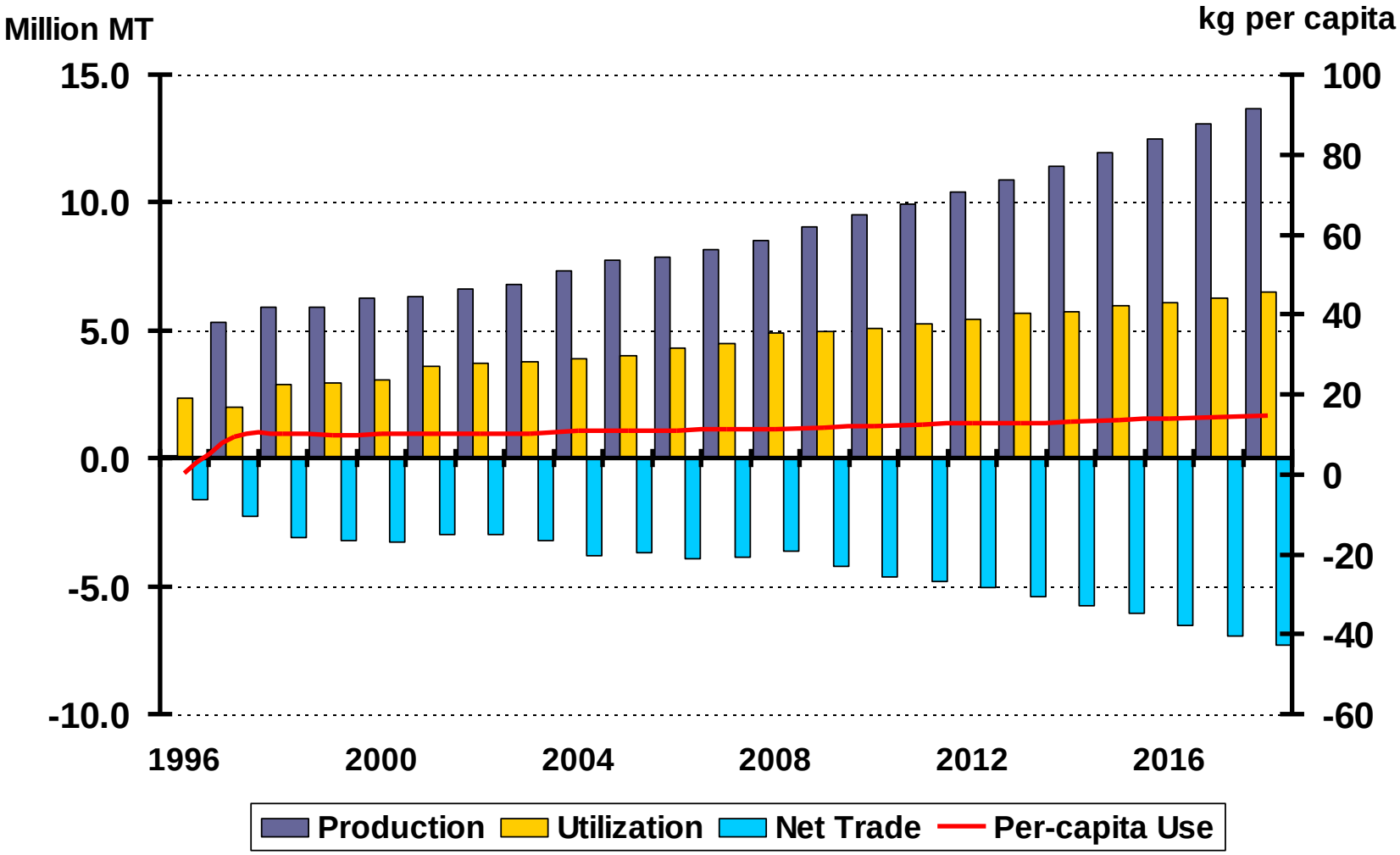
Least developed countries – Vegetable Oil

Production, Utilization, Net Trade and Per-capita Food use



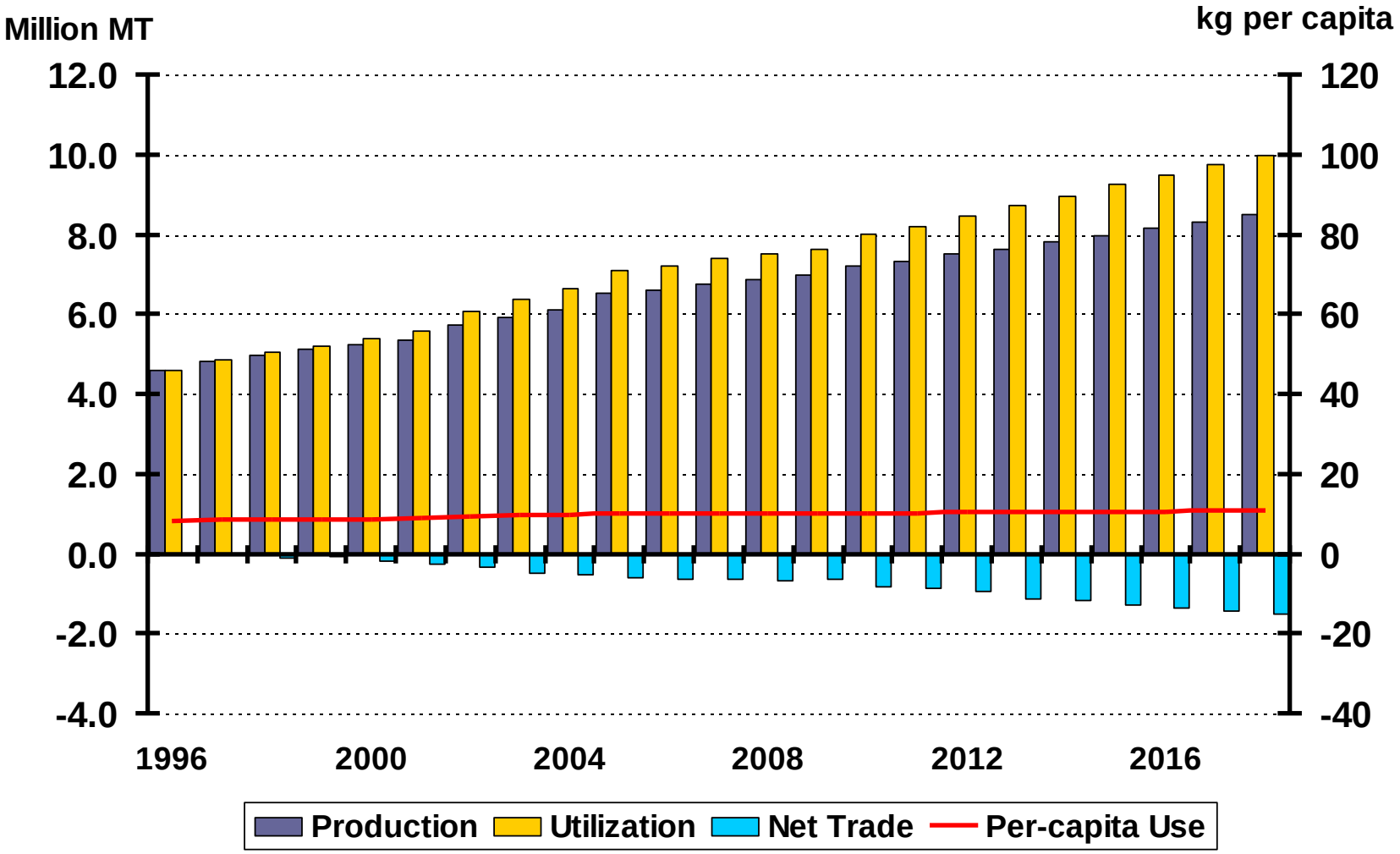
Least developed countries – Sugar

Production, Utilization, Net Trade and Per-capita Use



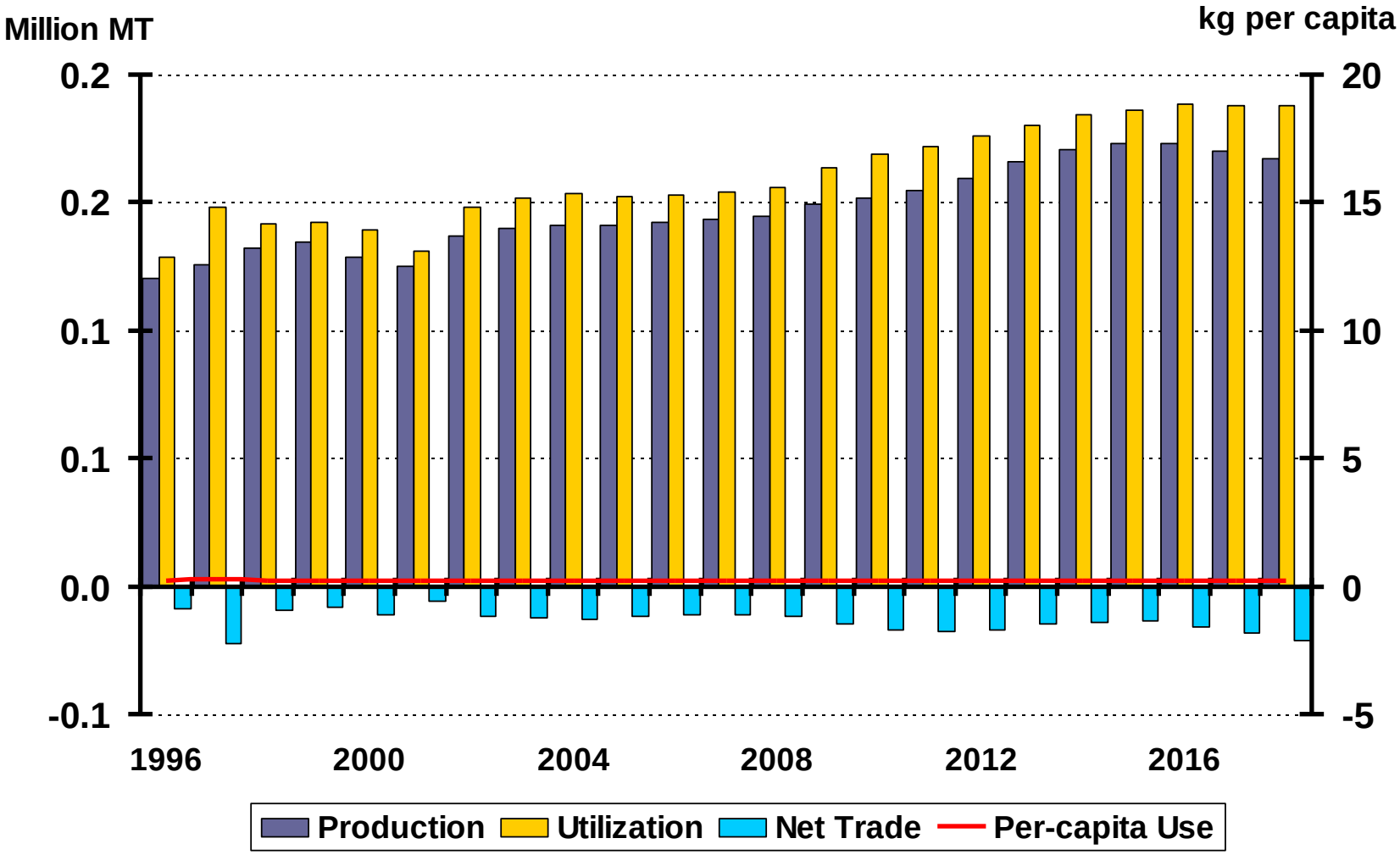
Least developed countries – Meat

Production, Utilization, Net Trade and Per-capita Use



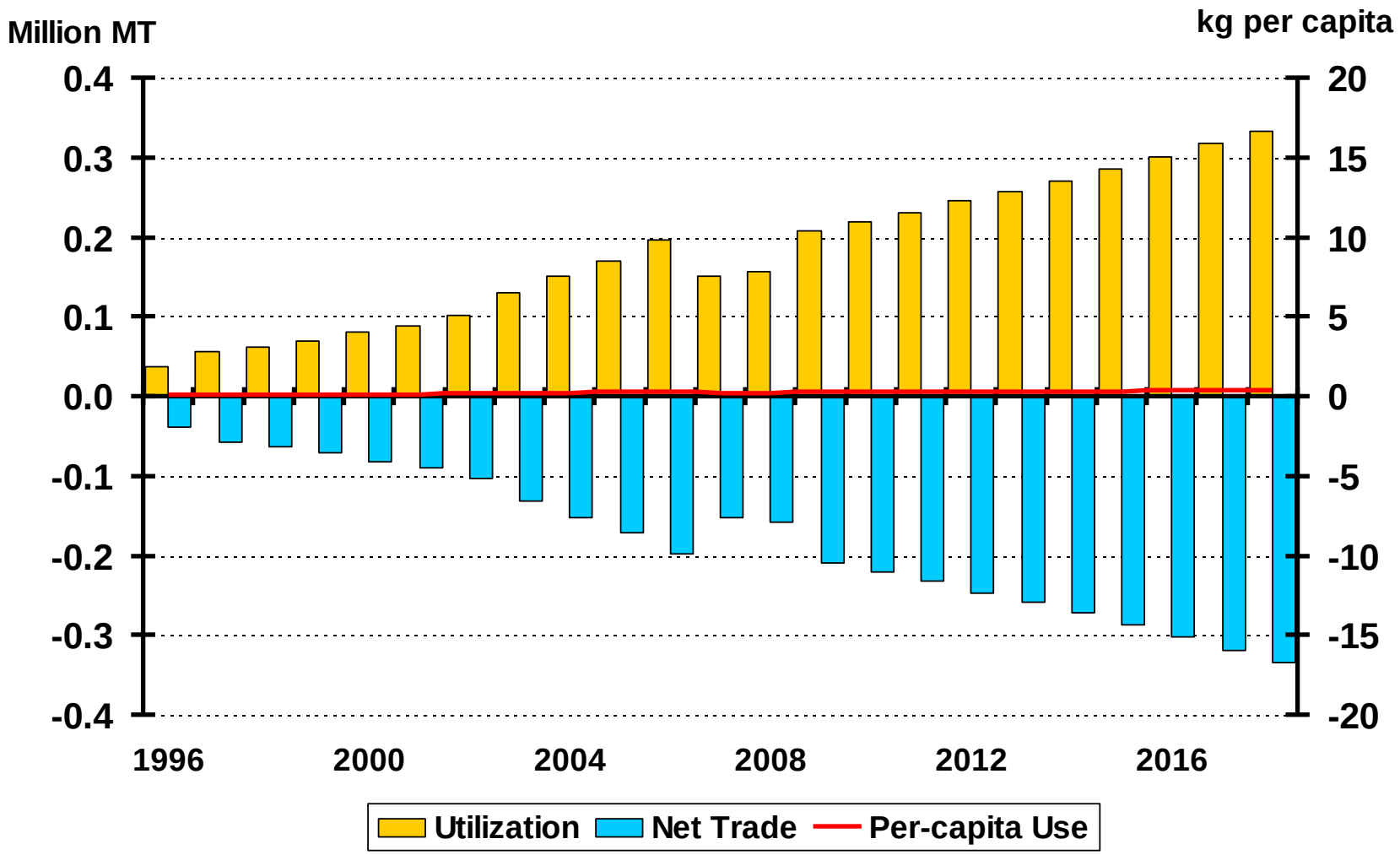
Least developed countries – Butter

Production, Utilization, Net Trade and Per-capita Use



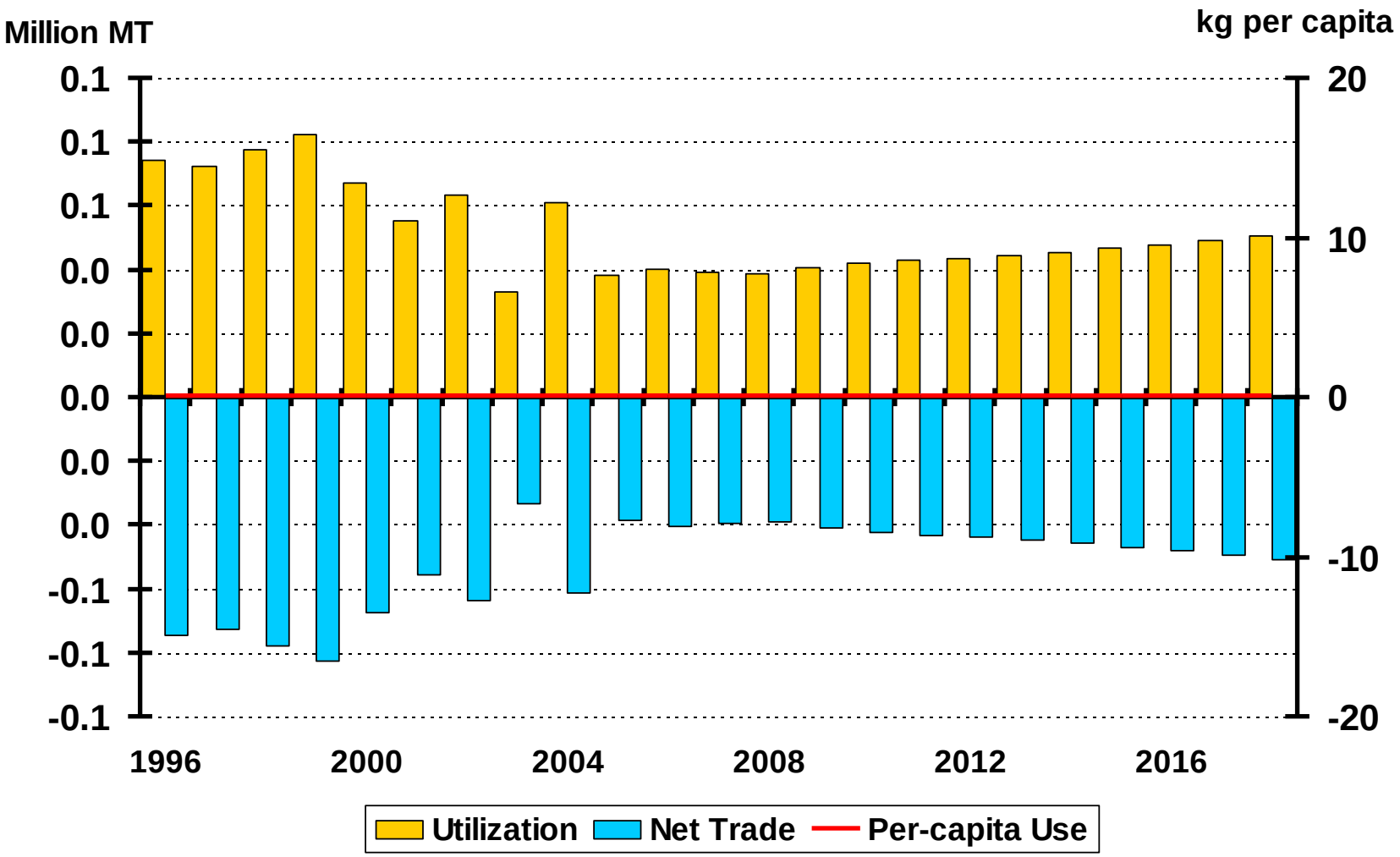
Least developed countries – Whole milk powder

Utilization, Net Trade and Per-capita Use



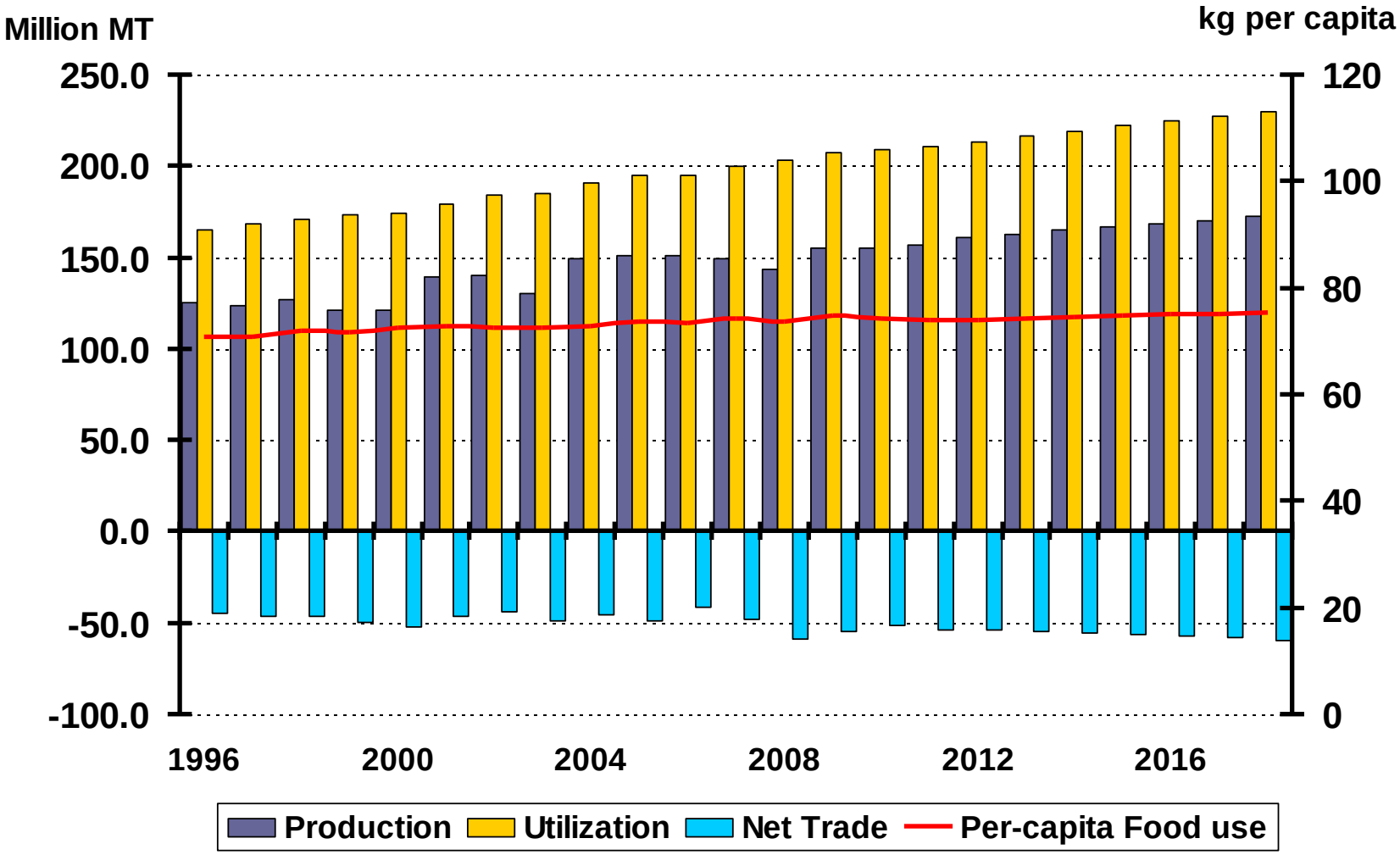
Least developed countries – Skim milk powder

Utilization, Net Trade and Per-capita Use



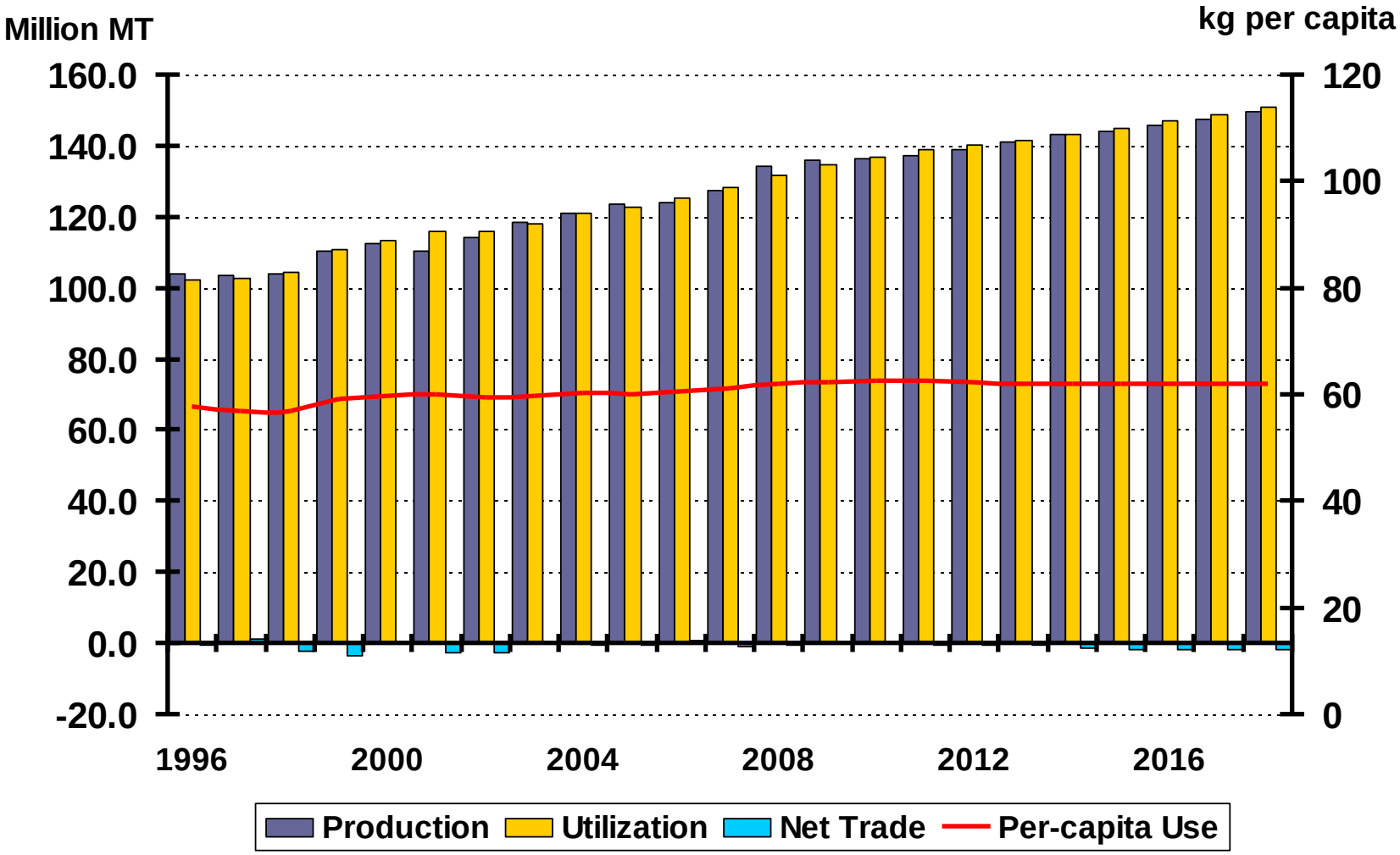
Other developing countries – Wheat

Production, Utilization, Net Trade and Per-capita Food use



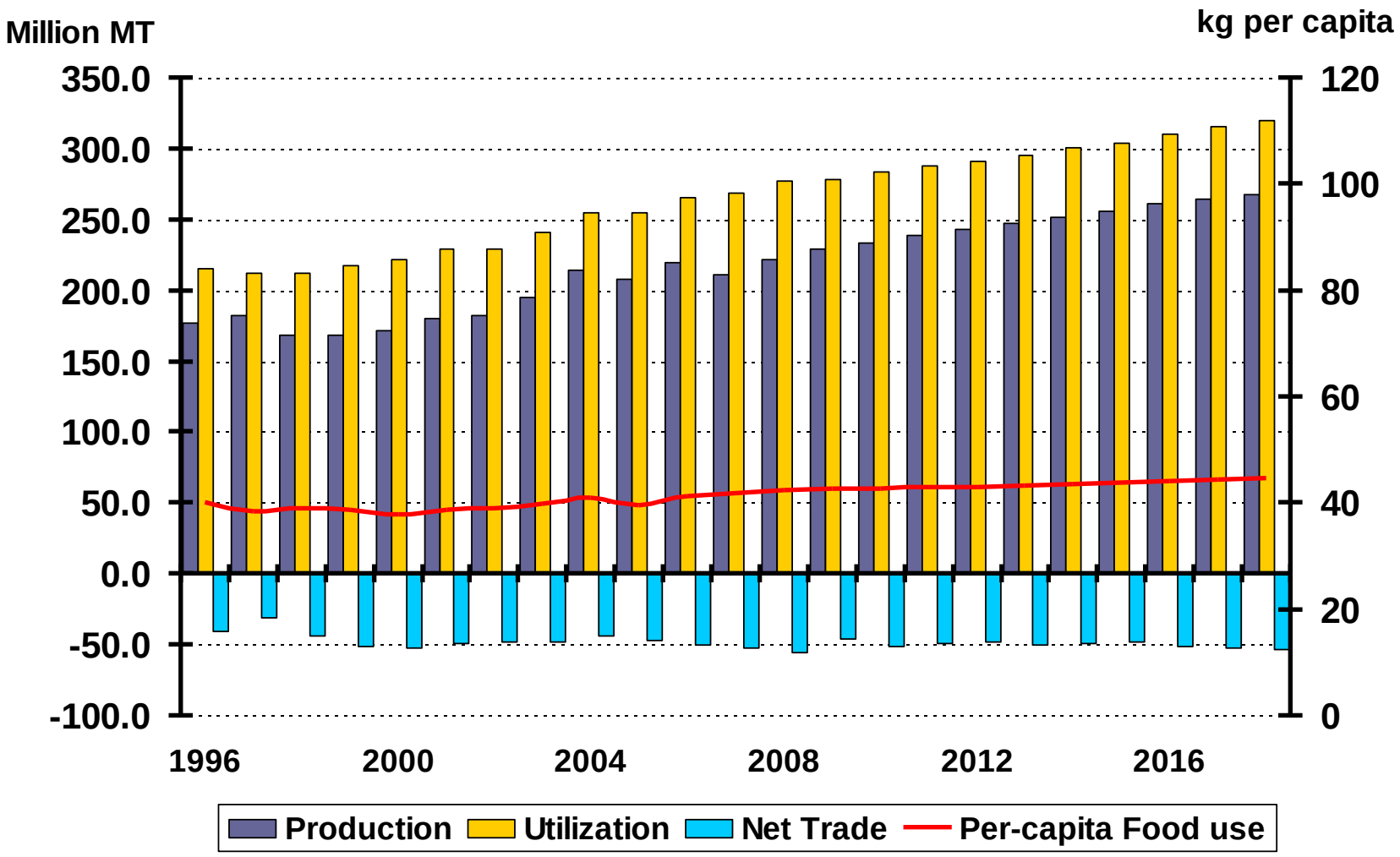
Other developing countries – Rice

Production, Utilization, Net Trade and Per-capita Use

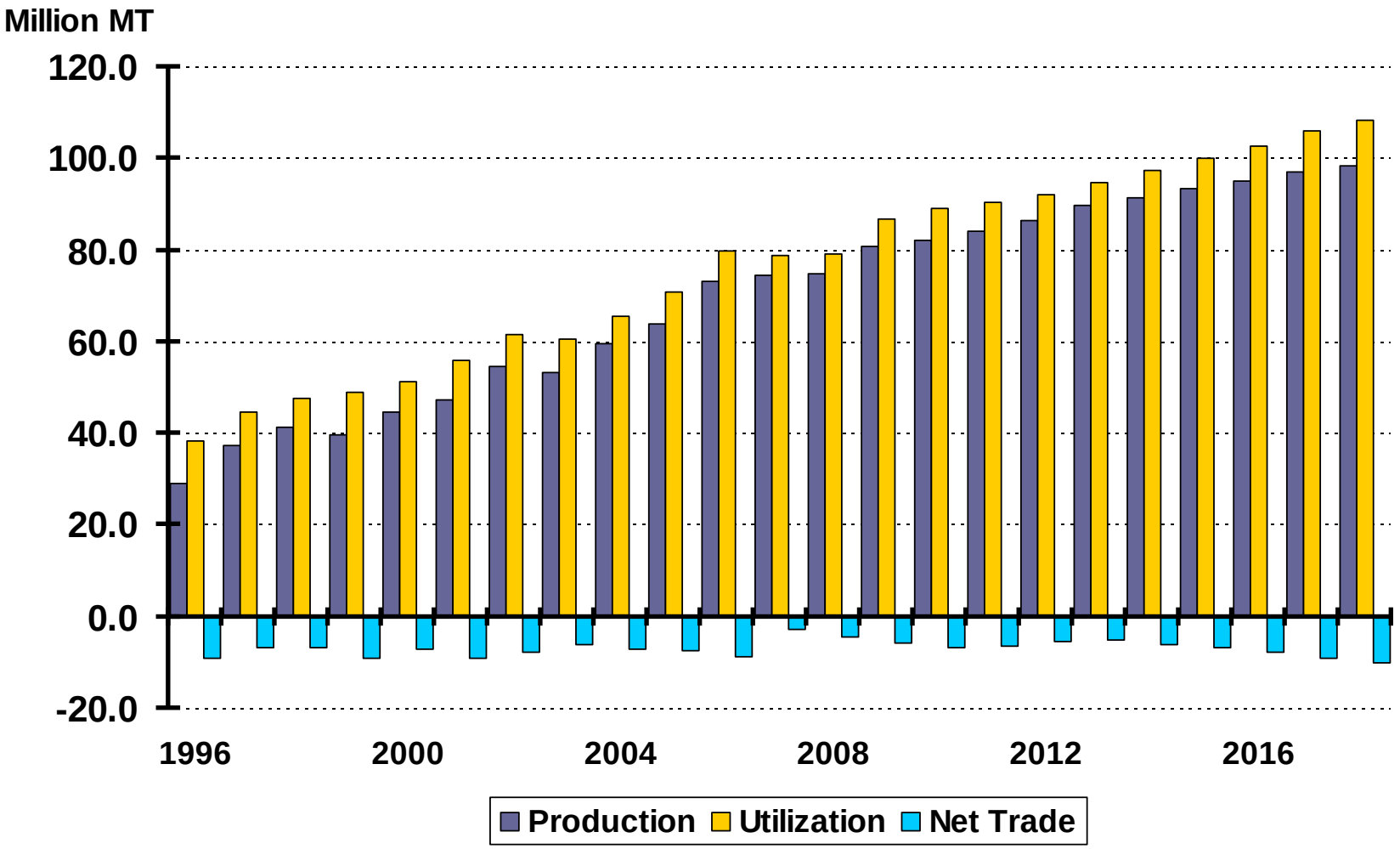


Other developing countries – Coarse Grain

Production, Utilization, Net Trade and Per-capita Food use

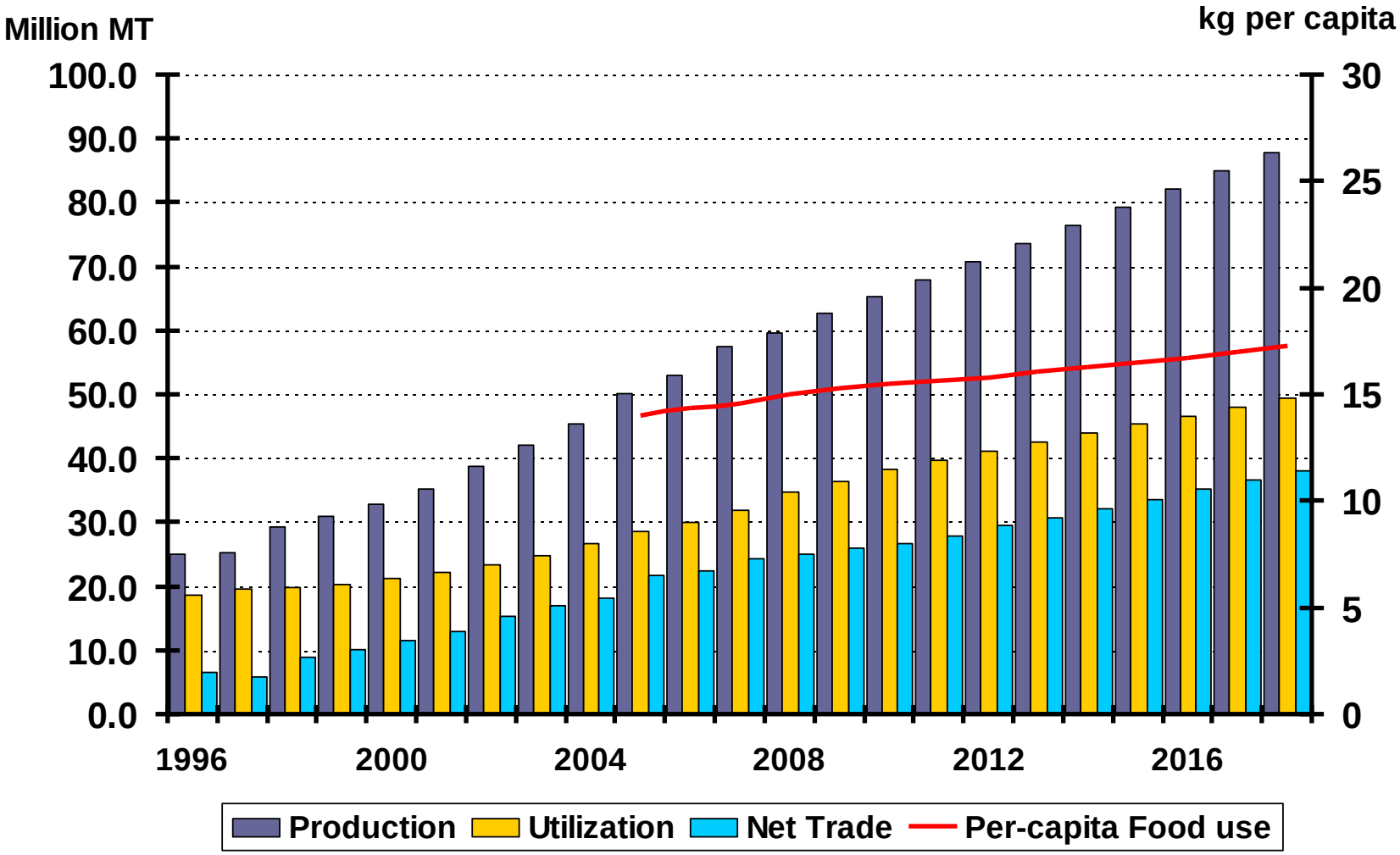


Other developing countries – Oilseeds
Production, Utilization and Net trade



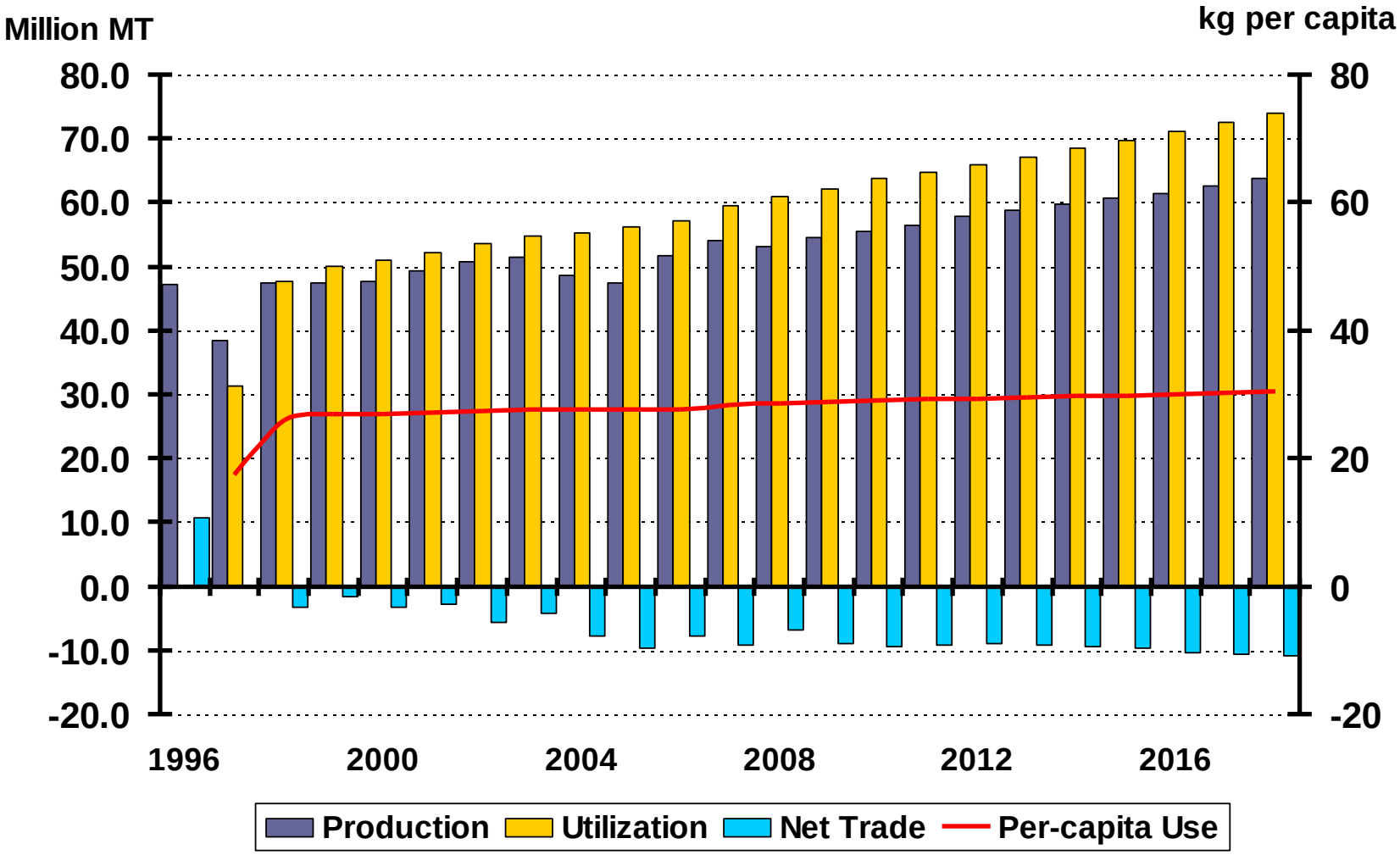
Other developing countries – Vegetable Oil

Production, Utilization, Net Trade and Per-capita Food use



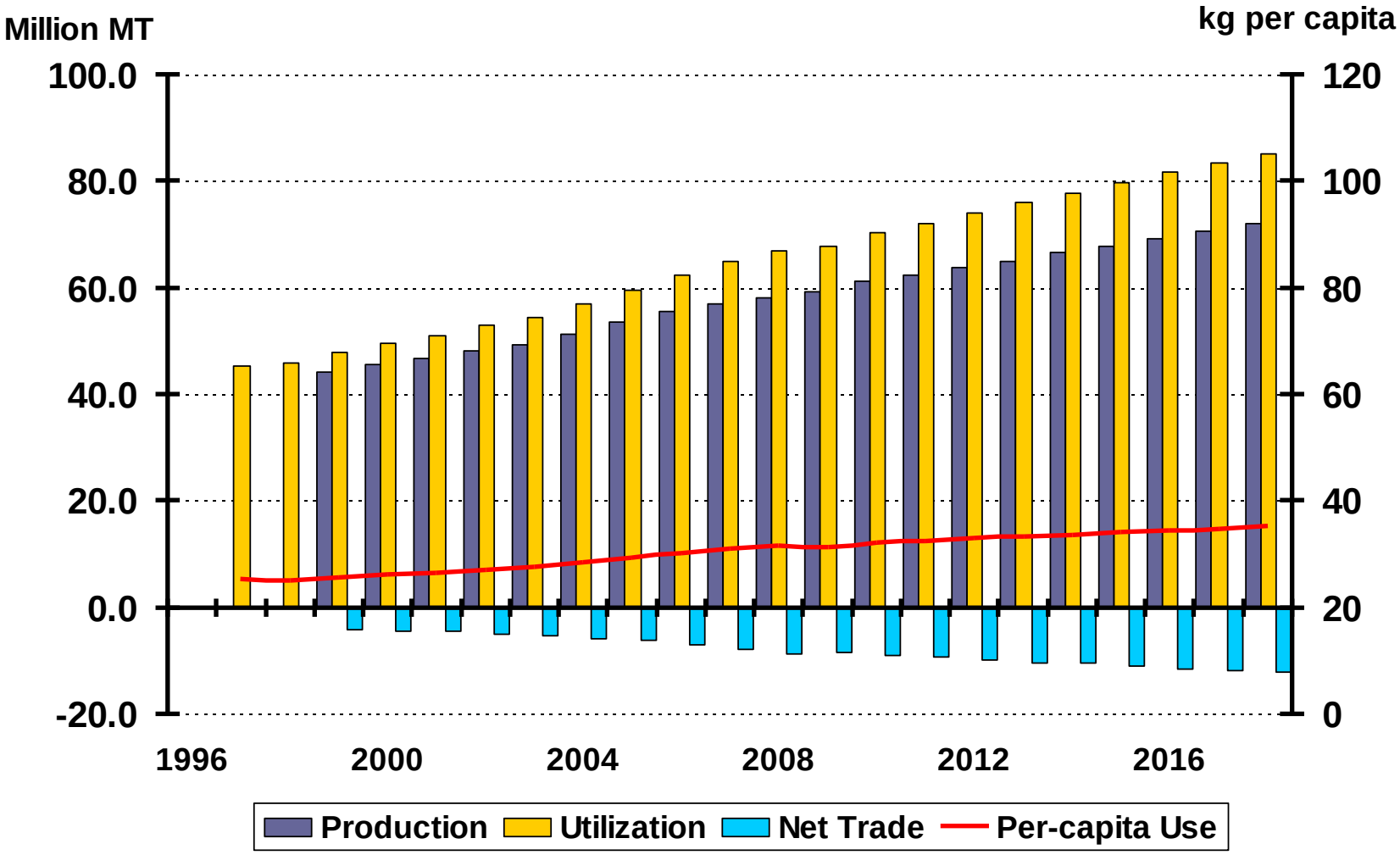
Other developing countries – Sugar

Production, Utilization, Net Trade and Per-capita Use



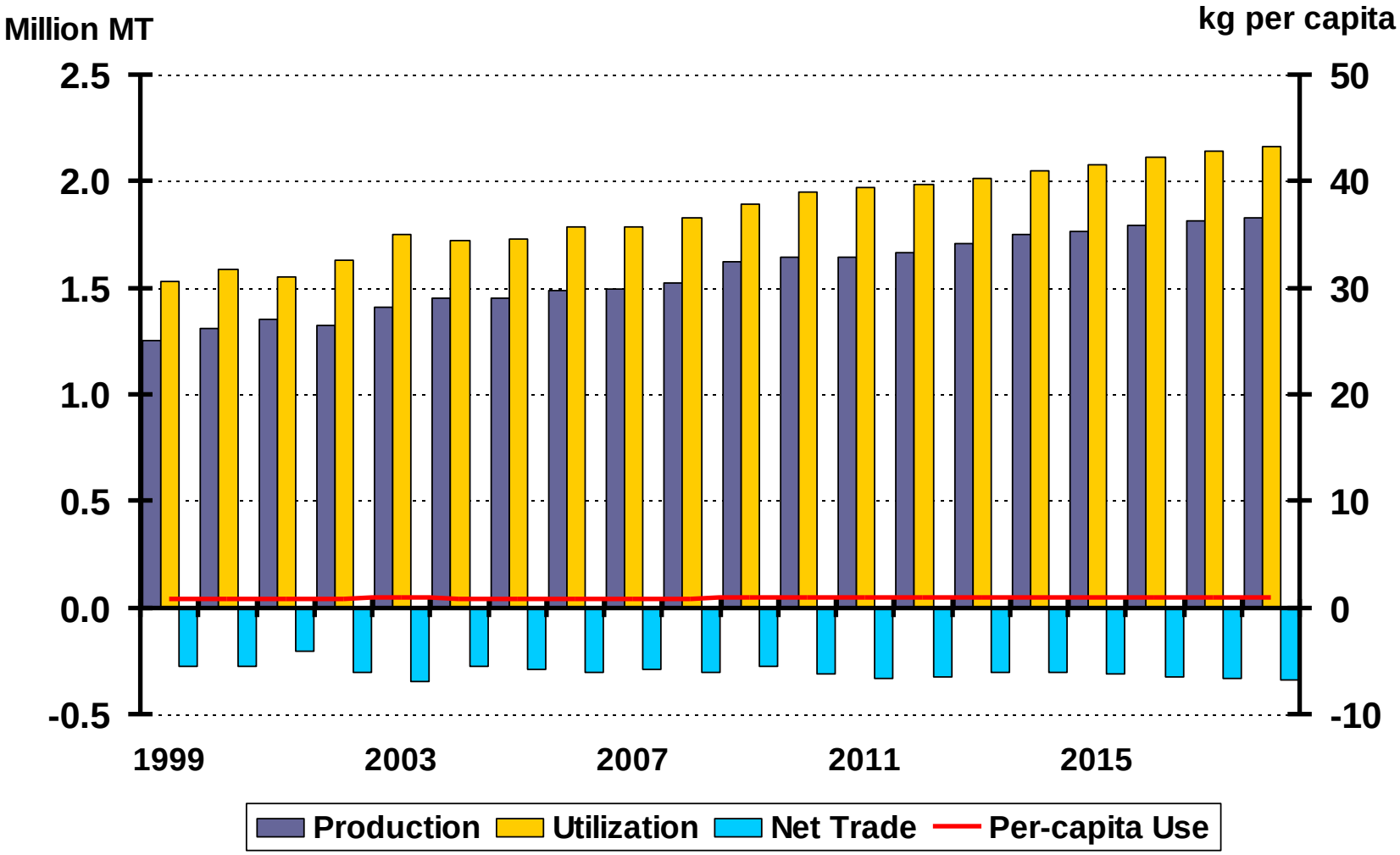
Other developing countries – Meat

Production, Utilization, Net Trade and Per-capita Use



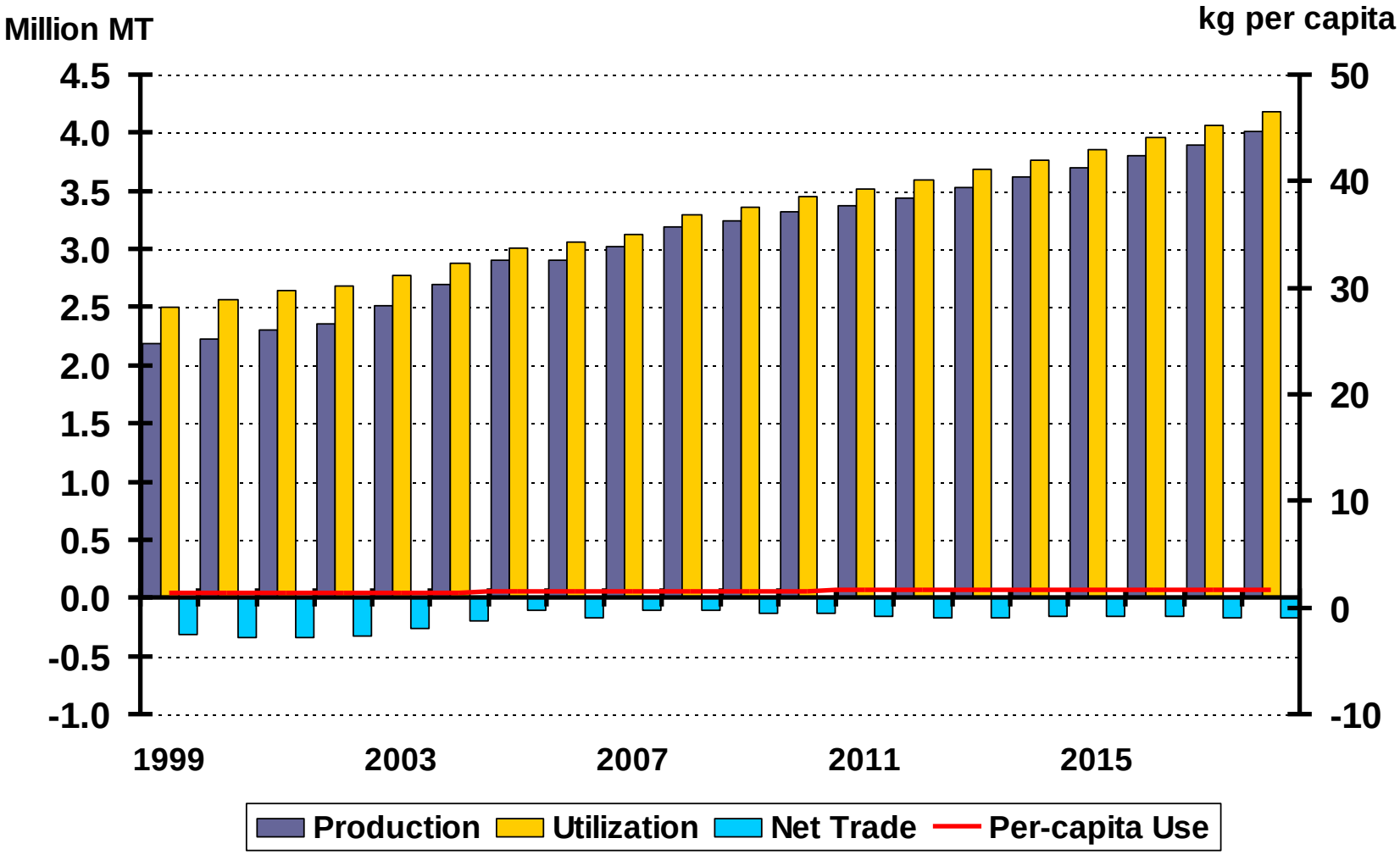
Other developing countries – Butter

Production, Utilization, Net Trade and Per-capita Use



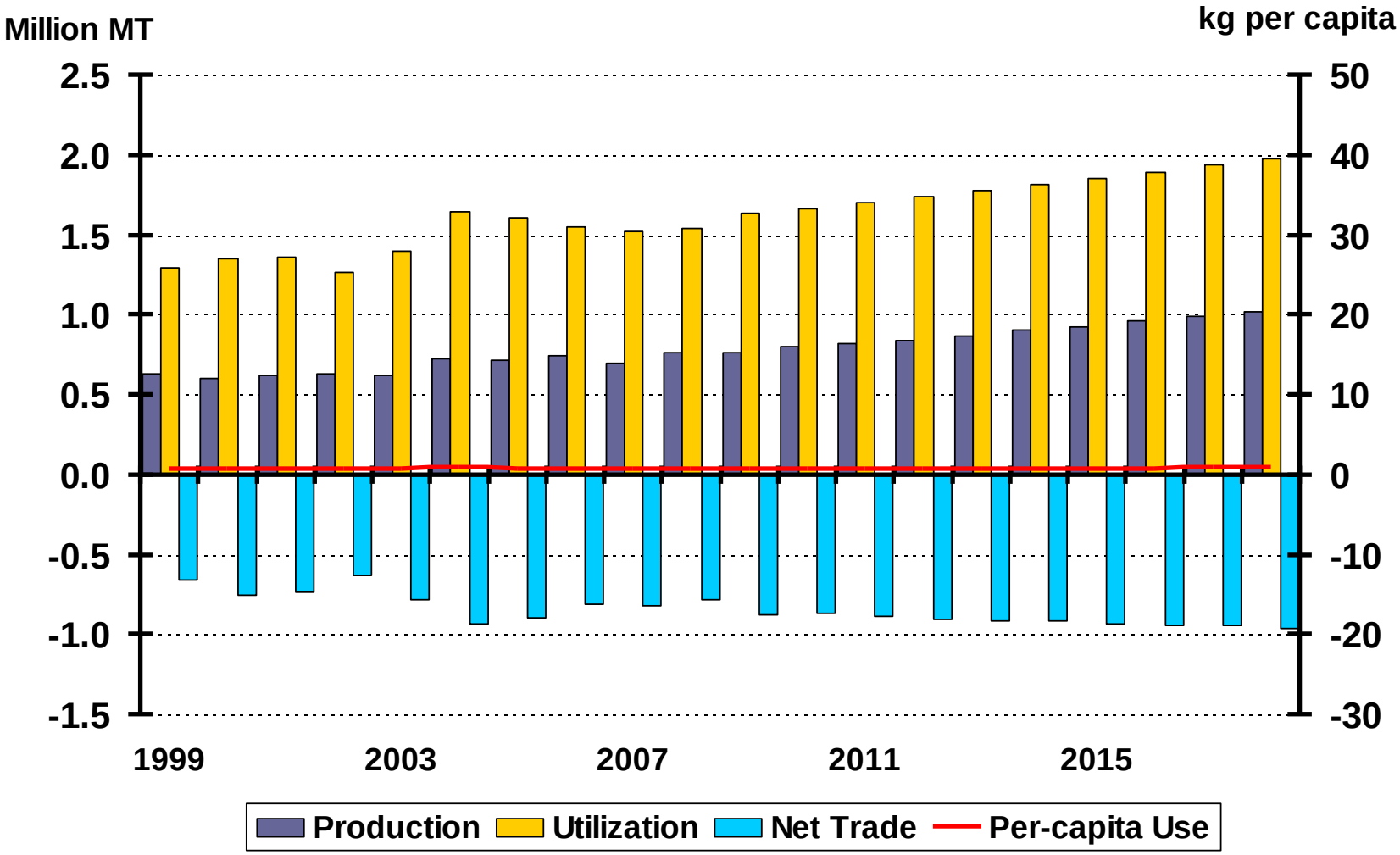
Other developing countries – Cheese

Production, Utilization, Net Trade and Per-capita Use



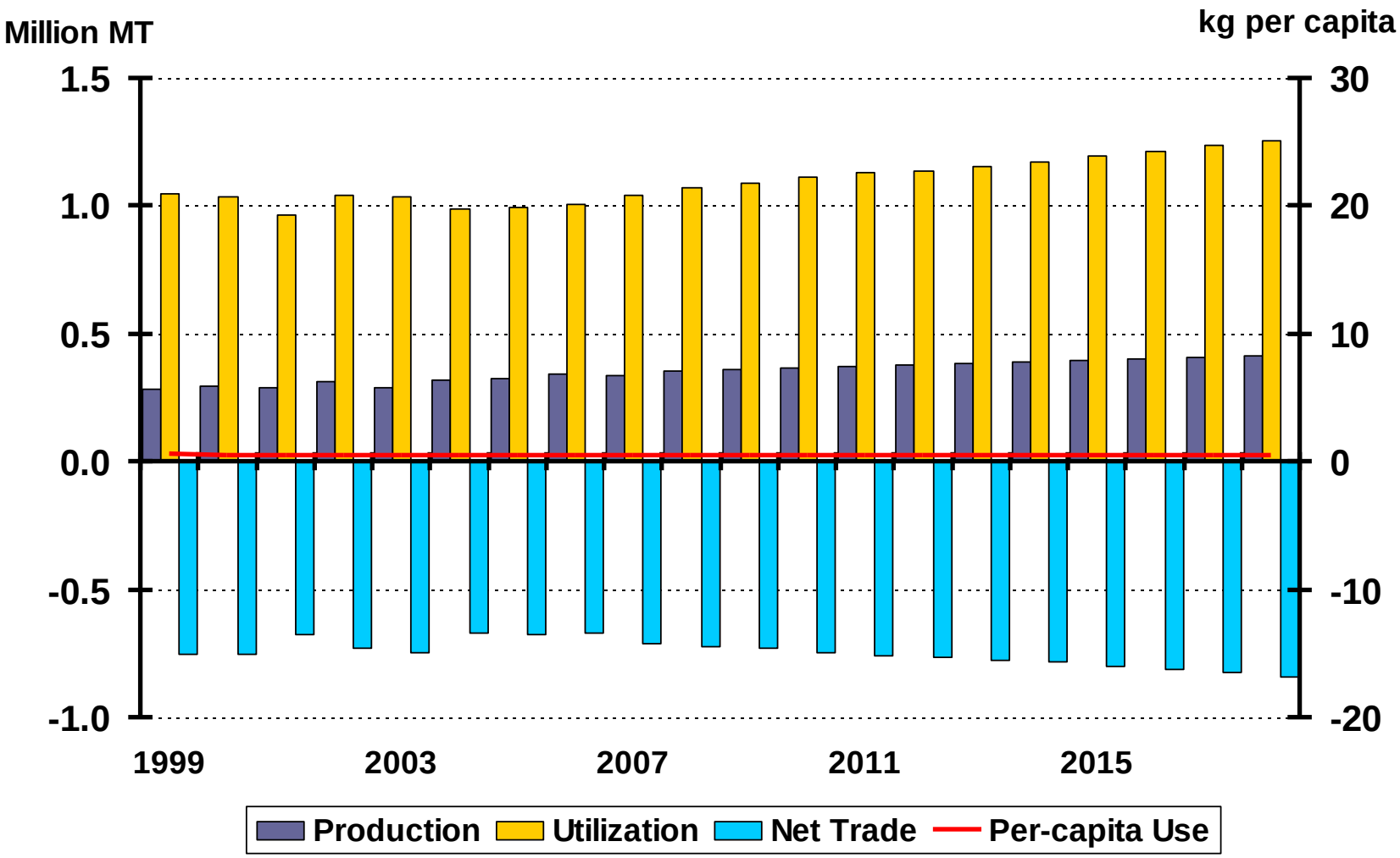
Other developing countries – Whole milk powder

Production, Utilization, Net Trade and Per-capita Use



Other developing countries – Skim milk powder

Production, Utilization, Net Trade and Per-capita Use



Least developed countries – Cheese

Production, Utilization, Net Trade and Per-capita Use