

Development Policy in 2032

Global Trends and Hypotheses on Future Development Cooperation Discussion Paper | March 2018

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Foreword



"The world gets more interconnected by the day. What we often miss, though, is the complexity of this system, the interrelatedness of all these factors, and the resulting uncertainty and especially ambiguity."

"The biggest uncertainties we will be facing are global governance, technology and the future of work."

anonymised quotes from Delphi participants

We are operating in a world characterised by growing complexity. An increasingly multipolar world order brings forth new actors and new technologies, which present challenges and opportunities at the same time. Unforeseen events, such as the Arab Spring, Brexit or the Trump Presidency left political and economic decision-makers unprepared. From this, we have learned that strategic foresight is a critical component of policy and strategy development.

In the 2018 Coalition Agreement, the Federal Government commits to further strengthen its capacities for strategic analysis and intensify its strategic communication especially in the policy fields of foreign affairs, defense, international cooperation and development. Within the Federal Ministry for Economic Cooperation and Development (BMZ), the department L2 "Strategic Planning and Management, Political Analysis" coordinates the long-term foresight activities of the BMZ and represents the Ministry on this topic on German federal as well as at the international level.

In our foresight approach, we do not just assume linear developments, but try to think in open, complex systems where non-linear and dynamic changes can occur. In particular, we are interested in the following questions: How can we prepare for unexpected events, above all in our partner countries, but also in Germany and around the world? How do we recognise impending crises?

Using methods such as horizon scanning or scenario analysis, we at the BMZ identify trends and drivers that indicate which futures are possible to get a better sense of uncertainties and to be better prepared for possible

developments and futures. The resulting analysis and openness for alternatives and different paths forms an important basis for strategic decision-making and planning of German development policy.

To look at the larger picture of global trends and hypotheses on future development policy a consultation process was undertaken for the second time using the Delphi method. This discussion paper compiles key results, findings and conclusions of the Delphi 2.0 consultation conducted between August and November 2017.

This study would not have been possible without the close cooperation and invaluable inputs by numerous international experts from the Global North and South. In total, 31 international experts from think tanks, bi- and multilateral institutions, civil society and the private sector took part in an online survey and participated in follow-up interviews. I would like to take this opportunity to express my sincere gratitude to our interview partners for their enriching and insightful contributions!

This paper aims at providing a basis for critical reflection and debate. We invite you to engage with the proposed questions for further discussion, and look forward to receiving your feedback.

Michael Krake Head of Political Staff

Middel Kale

Introduction

In an attempt to anticipate the future of global development and drivers of change, we have embarked on a second Delphi consultation process. From August to November 2017, we have sought to distil the most influential global trends that are likely to shape the world in 2032 and beyond. Synthesising the findings of a previous Delphi process in early 2016 with current research, we have formulated 30 trends, subsequently dividing them into six thematic clusters. We invited 31 policy makers and practitioners from think tanks, bi- and multilateral institutions and the private sector from the Global North and South to assess the trends in an online survey. More concretely, we asked them whether they agree with the described trends and whether they believe that development policy could have a positive impact within these trends. We also asked them to elaborate further through written comments. We then conducted select in-depth interviews to gain further insights into the dynamics and drivers of change.

This discussion paper presents the core findings of this process along the six overarching themes and outlines implications for the future orientation of development policy. Recognising the current phase of transformation where the interplay of factors drives change in near unpredictable ways, this paper does not attempt to predict the future. Instead, this paper describes the trends and drivers to provide insights in order to prepare a new line of thinking, seeing, and acting in the future. This reframing process looks specifically at what the uncertainties are and tries to avoid surprises. As such, this discussion paper aims to provide inputs for the critical reflection on potential drivers of change and to engender future oriented debates on the potential course of action among the international development community and policy actors.

Key findings of the Delphi process:

The trends and their ensuing discussions in this paper explore potential dynamics and challenges that will characterise the world in 2032. One of the key findings that many experts highlighted throughout this Delphi process is the increasing uncertainty and unpredictability of interconnected developments. As such, participants predict a phase of transformation in all spheres of life.

Experts have reconfirmed many of the trends and drivers from the Delphi process in 2016 such as the transformative impact of new technologies, negative impacts of environmental degradation and unsustainable lifestyles. They also underscored that increasing fragility and inequality, especially within states, will remain key challenges in 2032 while other factors such as growing urbanisation might offer new opportunities for positive developments.

They have also added some new perspectives and developments. For instance, the increase in current nationalist tendencies will potentially affect the dynamics and structure of global governance. The increasingly prominent role of

China on the global stage and at the regional and country level could lead to a new development paradigm that is no longer based on the Western democratic value system. Digitalisation and increasing connectivity will strongly affect dynamics of identity building and value formation. Increasing 'virtualness' is likely to create new social realities for people across the globe. Automation and digitalisation will have yet unpredictable effects on the future of work and as such will create entirely new dynamics in labour markets worldwide. The continued dependence on fossil fuels to satisfy increasing energy demands might slow down the global energy transition. Finally, a growing resistance to antibiotics might increase the devastating effects of new epidemics and diseases.

In the following, we will present the discussion on these and other factors as well as their interconnectedness in more depth. Based on the inputs of the participants, we will then present some implications for the future role of development policy and development cooperation.

Trends influencing development policy in 2032 and beyond

What will drive change in 2032 and beyond? To what trends and drivers should development policy actors pay specific attention? Which questions could guide them towards policy responses?

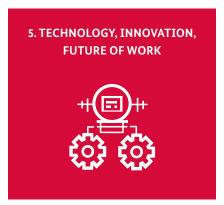
This section presents the assessment and discussion of the trends along six thematic clusters:











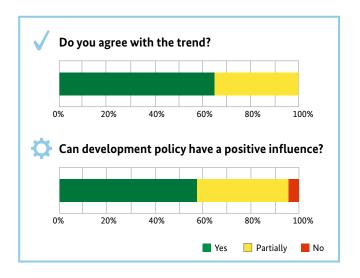


For each of these six clusters, the discussion paper first introduces the original trends and their assessment and then summarises the key inputs and points of discussion provided by the Delphi participants.

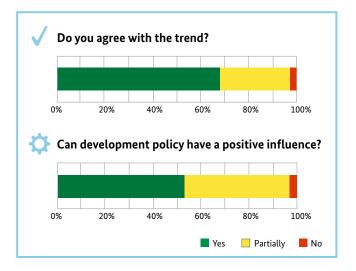


Cluster 1 Global governance, Interdependencies, (New) Actors & Global players

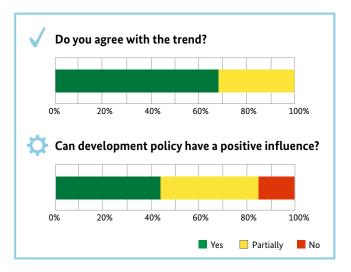
One of the key questions in 2032 is whether global governance mechanisms may serve to mitigate global public bads while promoting global public goods. Even though the 2030 Agenda and the Sustainable Development Goals (SDGs) have so far garnered considerable attention far beyond the development community, the outcomes of the SDG process are yet uncertain. Efforts to deliver on the agenda might lead to more effective multilateral institutions, global regulations and a coherent global approach to tackle development challenges. On the other hand, growing nationalist tendencies (including anti-globalisation, anti-aid and anti-multilateral currents) may undermine such efforts.



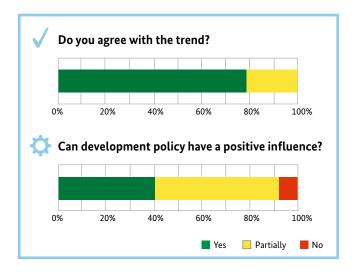
Responses to global challenges will be increasingly fragmented as the number of multipolar cooperations, plurilateral initiatives and regional solutions grow and new actors (e.g. private sector, private foundations, civil society organisations, local governments and cities) increasingly engage. Cooperation between likeminded states as well as actions of other influential actors such as transnational companies and foundations are likely to shape global agendas. International institutions will continue to be relevant, but they will struggle to adapt to a more complex environment and fragmented interests of their member states.



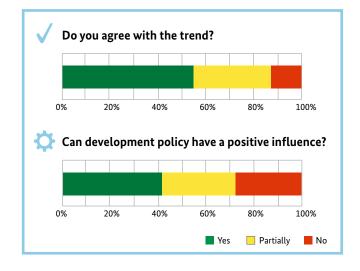
The number of **Middle-Income Countries (MICs)** will rise, making MICs the biggest group of countries and important players in global governance. MICs will remain a heterogeneous group in terms of size, population, socio-economic and structural conditions. Consequently, they will have a diverse set of aspirations, needs and interests, and articulate these strongly. A small number of the MIC group countries, such as China, India and Indonesia, are likely to grow faster than the world's established economies further changing the global power structures.



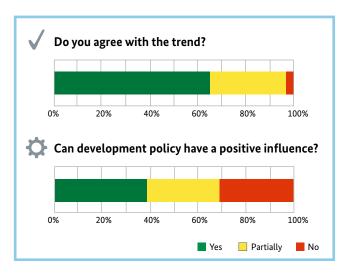
Developments in individual countries will have regional and global effects, driven by growing ecological, economic, financial and social interdependencies. Hazards such as conflicts, terrorism and disease outbreaks will often spread across regions or even around the world.



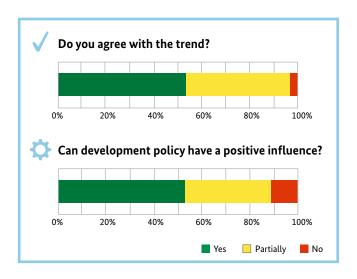
Global and regional interdependencies also increase the risk of a **volatile international financial and economic system**. Economic and financial crises are therefore expected to happen more often and/or have larger effects on a larger number of countries. At the same time, positive social and economic developments are likely to spill over.



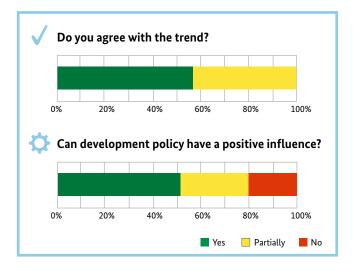
China's growing role and influence is being felt worldwide. China provides large volumes of funds on commercial terms, Chinese companies are active in many developing countries and are especially involved in large infrastructure projects, and trade with China is increasing. The two new multilateral development banks, the Asian Infrastructure Investment Bank (AIIB) and the New Development Bank, were co-founded by China. Compared to other international financial institutions and western aid agencies, China is taking far larger risks (e.g. related to creditworthiness or the failure to meet international standards) and is therefore able to expand its sphere of influence.



The **private sector** will become more prominent in international development and engage in international development far beyond Corporate Social Responsibility (CSR) programs and social impact investments. Businesses embed sustainability into core business practices with the potential to achieve impact in international development at a greater scale. In addition, large companies increasingly provide services for their employees (e.g. housing, education, health care). However, private companies are profit oriented and focus on the interests of their financial shareholders, which are short-term financial gains and less risky investments.



The financial clout of **private foundations and philanthropic organisations** is growing faster
than official development aid budgets are, and
their involvement in the development cooperation landscape is increasing. Philanthropic organisations contribute
to development (particularly in agriculture and health),
fund global research, promote dialogue on effective
development cooperation and leverage financial resources.
However, philanthropic organisations may also pursue
their particular interests, which may not focus on the goal
of improving a country's wellbeing.



Summary of the discussion of experts



"We are in a transition period in terms of the global order where we currently are and where we are heading towards."

"Connectivity is the new geo-strategic game changer."

"There is no sensible reason why the western model of 'aid-giving' and development cooperation should be regarded as the 'international standard' or the 'gold standard' for the aid industry."

Participants agree that the **global governance system** will radically change in the future. However, the course of these changes is still highly uncertain. The interplay of numerous factors such as geopolitical factors, nationalist tendencies, the plurality of actors as well as new technologies and increased connectivity will undoubtedly shape the future dynamics of global governance.

First, a new plurality of actors with their own development agendas, nationalist as well as anti-globalist currents will challenge the multilateral system to produce positive results in order to remain relevant and continue to be a central platform of engagement in the future. A relative failure of the 2030 Agenda could put the legitimacy of multilateral institutions as well as those of many Northern development actors into question. While some trust that the 2030 Agenda has enough momentum to generate strong positive impacts, others argue that international commitment and that of industrialised countries is waning. One question will be whether industrialised countries will sustain or increase their support for developing, emerging and further countries lagging in the 2030 Agenda to assist national level implementation of the Sustainable Development Goals (SDGs). As cautioned by some participants of the Delphi process, nationalist and anti-globalist currents as well as extremism, fundamentalism and illegal migration could strongly undermine the commitment of states to development cooperation and cause a diversion of funds away from developing countries. These currents might

even reverse the achievements made to date. A lack of reforms could further undermine the relevance of the current global governance system. Consequently, multilateral institutions will need to undergo comprehensive reforms that - as gathered from individual comments should create more equity between the Global North and South. Participants further mention they should integrate a wider range of actors such as cities, new representative movements, civil society organisations and corporations. As put by one participant, these reforms will require strong and courageous leadership as well as the reform-mindedness and commitment of member states. It remains to be seen whether member states and the institutions themselves will develop the necessary commitments to carry out such extensive reforms or if they merely continue improving the system at the margins.

Shifts in the balance of power in the state system as well as the growing influence of middle-income countries will drive transformations of the current global governance system. Power is already shifting from the West towards new centres of economic power in the East, particularly towards **China**. Indeed, most participants agree that China's sphere of influence on the global level as well as in many ODA countries will continue to grow. As described by some, the Chinese model for development is an oftenwelcome alternative to the current model of aid giving, especially among the group of middle-income countries (MIC). This could affect development cooperation as

currently practiced although alternative ways will need to be analysed in more detail. In addition, Chinese platforms on mobility and trade as well as schemes such as its social credit systems can have lasting impacts on the behaviour of firms and individuals. However, some participants are more cautious about China's influence on the global system and suggest that the stability of China's global engagement might be overstated. Particularly in terms of spending, China will likely need to set strategic priorities. Geopolitical factors such as rerouting maritime routes or changing governance patterns are likely to have impacts that are yet difficult to predict. Depending on their economic and military power, MICs will gain influence within the system of global governance. As emphasised by some participants, the key question will be if they can find grounds for alliances and exert influence as a 'collective' or whether only selected MICs will have influence on the global stage. In any case, the rise of individual MICs or the collective will contribute to an increasing plurality of actors within the state system.

Beyond the state system, many participants also foresee an **increasing plurality of sub-national actors**. With urban centres rising in importance, city governments will gain influence in the governance system and might form new alliances based on city conglomerates. New technologies and increased connectivity will facilitate the emergence of new actors, such as (global) online communities, around specific issues and identities, denoting their potential role in becoming influential players in the global system.

Conventional actors such as the private sector and philanthropic organisations already have a strong presence on the global stage and contribute towards development goals globally and locally. This might become more prominent in the future, although some participants question whether the influence of philanthropic organisations will further expand. Regarding the private sector, the future dynamics of its involvement are still uncertain. To understand its role in development and governance better, numerous participants urge to differentiate between the various segments of the private sector. For instance, larger international companies and social entrepreneurs will play a prominent role in global efforts to tackle development challenges. On the national level, some suggest paying particular attention to the role of Small and Medium Enterprises (SMEs) in the Global South. Access to new technologies could drastically reduce their barriers to market entry and increase their business capacities. It is still uncertain whether increased

SME activity in the Global South will also translate into private sector contributions to providing social security. As suggested by one participant, both the changing role of labour and the nature of work will largely determine whether this will be the case.

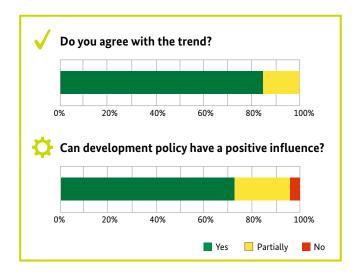
This growing engagement of non-state actors in global issues might challenge the position of states as central actors in the international system. Participants predict that this new plurality of actors will further complicate collective action and can thus lead to increasingly fragmented responses to global issues. Plurilateral initiatives and issue-based alliances will become prominent avenues for tackling development challenges and might eventually replace the multilateral system as main forms of engagement. One participant suggests that new streams of connectivity will greatly facilitate cooperation between different partners and might lead to the creation of entirely new transnational institutions. Considering this increased fragmentation, new means will need to be found to rally and coordinate increasingly diverse actors around issues of common concern and to effectively respond to progressively complex and interconnected challenges.

Indeed, most participants agree that positive and negative developments will continue to move beyond national and regional borders. While an increased focus towards the local production of goods and services might increase stability, the severity of regional and global spillovers will depend on the capacity for flexible responses and on the relative strength of the cooperation framework. Regarding financial interdependencies and the related threat of crises, some participants question whether interdependency translates into more volatile systems as national financial systems could become more resilient through the use of emerging technologies. Consequently, the use of blockchain and other technologies based on artificial intelligence (AI), digitalisation and automation could result in increased stability.

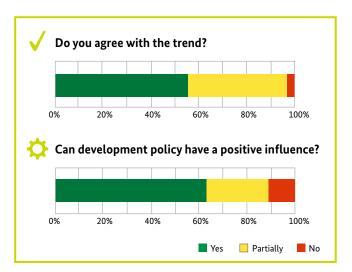


Cluster 2 Environment, Climate change, Natural resources, (Un-)Sustainable lifestyles

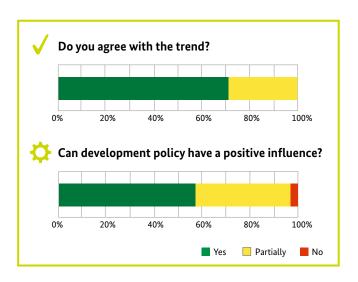
Climate change and environmental degradation (e.g. water, atmosphere and space pollution, soil erosion, food security, and natural hazards) will have increasingly adverse consequences for humankind's overall quality of life. An increasing portion of the global population, especially in certain developing countries, will be vulnerable to the direct and indirect social, economic, political and security effects of climate change.



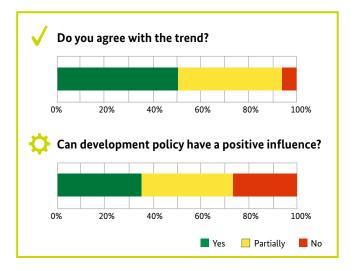
Natural resources (e.g. water, land, rare-earth elements) will become increasingly scarce due to population growth and higher levels of consumption. The rising demand for scarce resources increases competition for new exclusive resource-partnerships as well as the risk of conflicts over resources. Furthermore, the rise in demand for these commodities may stress the urgency to tackle mining-related issues such as supply chain transparency, environmental impacts and social standards. New technologies may, however, offset many of the adverse effects of resource depletion.



As the world's population grows, economies develop, middle classes expand and numbers of absolute poor diminish, consumption will almost inevitably rise worldwide. Non-sustainable consumption and production patterns therefore threaten scarce (natural) resources. To maintain growth within the ecologic boundaries of the planet, governments and the private sector will be under pressure to implement new and sustainable forms of consumption (e.g. circular economy).



The advancing global energy transition will drive fundamental changes in geopolitics. The declining demand for fossil energy sources in industrialised countries and emerging economies will undermine the power basis of regimes in many producing countries. The strong policy strategies for sustainable energy development by many countries will contribute to the high volatility of the markets and to the falling prices of, in particular, oil. Countries that are highly dependent on fossil fuel exports and that did not take action to diversify their economy face political and economic destabilisation. With regard to international cooperation, a shift is expected from strong regional economic cartels to an internationalised policy arena that shapes the framework for an increasingly transnational energy industry.



Summary of the discussion of experts



"The consequences of climate change will be most extreme where it coincides with state fragility and population growth."

"Environmental degradation will be met with counter efforts through technological advances and a greater degree of political will as these effects are being felt more widespread."

"Levels of consumption across the world are only now receiving the type of attention they have deserved for many decades. It is not too late."

Participants agree that effects of climate change and environmental degradation such as natural disasters, extreme weather situations and desertification will have impacts worldwide. While the effects might be ambiguous in terms of the area and people affected, some predict the most severe impacts will occur where fragility and high population numbers coincide. One participant suggests paying attention to points where climate change effects overlap with political voice and economic inequality. These factors might determine whether the impacts will remain local, for instance by causing high numbers of fatalities, or have regional or global repercussions that cause (violent) uprisings and conflicts.

The severity of these and other climate change effects will be contingent on, among others, the extent to which states and other parties will take collective action to mitigate climate change and promote the sustainable use of resources. Thereby, it also depends on **states' and their**

citizens' level of commitment to alter their behaviour.

One participant voices concern that developed countries faced with negative climate change impacts on their own territories might reduce their aid pledges to mitigation efforts and invest more into adaption initiatives within their own borders. This could adversely affect global progress on climate change mitigation. Moreover, it remains uncertain whether states and individuals will change their behavioural patterns. As noted by one participant, a tendency among the middle classes worldwide towards more sustainable consumption and lifestyle habits does exist. However, industrialised countries nevertheless still exhibit the most unsustainable production and consumption patterns. These countries play a critical role in leading by example in terms of promoting more sustainable lifestyles. Many participants highlight that factors such as globalisation, urbanisation and population growth could further spread and aggravate unsustainable behaviours. In case no fundamental behavioural changes in this and other areas

take place, the trends in climate change might have far more consequential impacts than currently anticipated.

Consumption and production patterns as well as the effects of climate change will also influence the level of natural resource scarcity. As noted by one participant, population growth and growing middle classes, among others, could significantly increase the demand for various natural resources. Innovations, technological progress and models such as the circular economy, as suggested by some, could decrease the demand for others. For instance, new methods such as 3D printing might reduce energy and water requirements for the production of some goods. Nevertheless, participants suggest that access to resources will likely be a stronger determinant of power in the future and could coincide with shifts in the global balance of power. Some emphasise that the way in which states manage and govern the access to resources will determine the social, political and economic effects of resource scarcity. It might also lead to new dynamics of cooperation and trade. As noted by some participants, states and private sector actors might increasingly invest in buying sources of water. Concerning food security, states might use other countries as locations for their food production; rural areas will produce for cities. These shifts in food markets can coincide with land grabbing for food production. Land grabbing will also stay a relevant issue in relation to other resources and may spark more domestic and inter-state conflicts. Thereby, increased scarcity could threaten regional stability.

Concerning the **global energy transition and demand for fossil fuels**, some participants suggest that fossil fuels will continue to stay relevant for longer than anticipated. They doubt that renewable energy sources will produce enough power to cover the increasing energy needs within MICs and growing demands by the middle classes. The ways in which the gradual energy transition will affect oil exporters remains to be seen. While one participant believes that the lack of economic diversity could lead to a destabilisation of fossil-fuel exporting countries, others suggest prices for fossil fuel might not decrease to such an extent that it

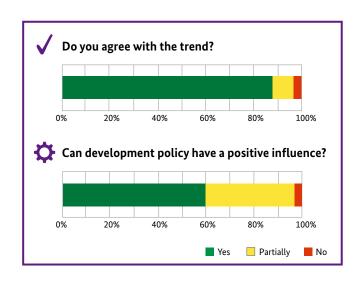
destabilises economies of oil exporters. In the case of a successful global energy transition, most participants emphasise that the spread of renewable energy technologies will be largely decentral and context-specific in nature and therefore doubt the emergence of an increasingly transnational energy industry.

Perhaps one of the crosscutting factors frequently mentioned by participants in relation to these trends are **emerging technologies**. Innovative technologies and solutions to mitigate effects of climate change are already emerging and are leading to new trends in urban planning and infrastructure. In the case of consumption and production patterns, new technologies might allow for more localised production, adding to increased sustainability. For instance, the use of innovative technologies might also support more localised food production and thereby add to food security. Innovations to cut and recycle waste might also reduce the negative effects of increased consumption and production.

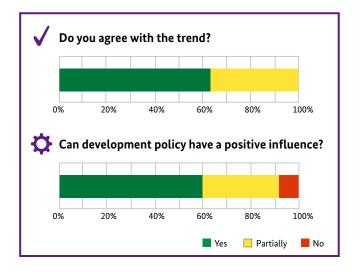


Cluster 3 Demographic change, Urbanisation, Mobility, Migration

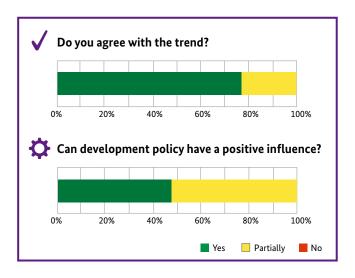
The world's population is projected to increase to 9.8 billion people by 2050. While the population is aging in OECD countries and a number of emerging economies, growing populations will be evident in many developing countries. There are large variations in fertility levels across countries and regions, and countries display varying levels of preparedness for demographic change. Growing working-age populations and declining fertility rates create the potential for a 'demographic dividend'. However, the preconditions (e.g. infrastructure, jobs, favourable investment climate) for making use of this dividend are still lacking in many countries, particularly those in Africa, and it remains questionable whether they will be able to make use of its potential. The biggest declines in the working-age population will be in Europe, Japan and a number of emerging countries such as China, Brazil and Russia.



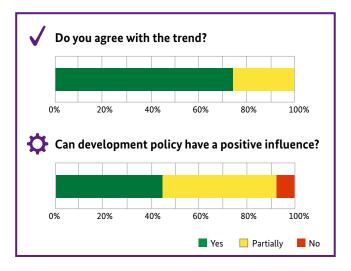
Two-thirds of the global population are likely to live in urban areas in 2050, which represents an increase of 72% on today's level of **urbanisation**. The largest growth in urban areas will be in Africa and Asia. The world will, at this point, have reached a crossroad and will have to choose a way forward to managing rapid urbanisation, especially given the high demand for infrastructure. If urban growth is badly managed, severe adverse consequences can be expected for many development objectives such as environmental protection, the reduction of carbon emissions and poverty eradication. The metropolitan areas growing at a particularly fast rate - usually the economic powerhouses of emerging and developing countries - will reach and exceed their limits of capacity, which may lead to collapse, threatening social cohesion and endangering economic development. Urbanisation is intimately bound up with demographic growth in Africa and Asia.



While the mobility of people living in severe poverty will continue to be restricted, voluntary migration will increase in large parts of the world. The potential effects of this movement will be brain drain for some countries and brain gain for others, but also the development of countries of origin through, for example, brain gain and circular migration, remittances, engagement of diaspora organisations.



Forced migration caused by violent conflict as well as lagging development and environmental degradation will continue to increase. Given the protracted nature of many of the world's violent conflicts as well as persisting situations of insecurity and fragility, return and reintegration will remain unattainable for many forced migrants. South-South migrants will continue to make up the largest group of forced migrants. It is important to note that it is becoming increasingly difficult to distinguish between voluntary and forced migration. The differences are not always clear because the motivation for migration is usually a mix of economic, political and social factors, migration routes used by migrants and refugees are often the same, the status of a migrant may change over time, and so on.



Summary of the discussion of experts



"In an age of rapid automation, human workforce and demographic dividends lose much of the power and influence it once had. (...) It may be an old fashioned category to look at the issue."

"How the world urbanises – and develops current urban regions – will be the key to humanities' future and thus should be the primary focus of development policy."

"New technologies enable a totally different migration, creating new types of social realities."

Participants agree that the **world's population** will continue to be on the rise in 2032, albeit differently in the various regions. Numerous factors such as education, female empowerment, access to the labour market as well as the occurrence of conflicts and natural disasters will affect growth rates differently across countries and regions. Some suggest that effects of girls' education and female empowerment on fertility rates might slow down population growth more than anticipated. Environmental disasters, pandemics and conflict could also affect the population size. Opinions diverge on whether countries with large working-age populations and few dependents will be able to make effective use of demographic dividends, due to uncertain effects of AI and increasing automation.

As indicated by some participants, **circular migration** between low-income countries with growing populations and high-income countries with ageing populations might be one channel through which receiving and sending states could address needs arising through demographic change. If states successfully encourage schemes of circular migration, migration will entail brain gains for the host country and country of origin. Here, one participant suggests that it will be interesting to see how digitalisation and connectivity will transform notions of brain gain and brain drain.

Beyond potential policy schemes of circular migration, **migration** is likely to become the new normal. Participants agree that the distinction between forced and voluntary

migration is already and will become increasingly blurred. Effects of climate change, political inertia, conflict and rapid urbanisation will be the core drivers of migration. As suggested by some participants, environmental degradation will considerably boost migration levels and might become one of the main causes of forced displacement. Increased connectivity as well as the relation between spatial and social mobility might motivate more people to migrate. Technologies will likely shape new social realities for migrants. Some participants predict that states will react to these increased movements by ushering in more stringent migration policies that might considerably restrict regular migration and mobility. These stringent migration policies might also translate into fewer rights for migrants in the host countries. As suggested by some, migrants might further face increasing hostility. Benefits of migration in terms of the migrant's income level, education and security of whole families will likely remain.

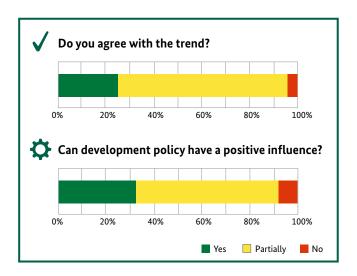
Demographic change and migration, among other factors, will also boost levels of urban growth. Many participants highlight that **urbanisation** and growing urban centres will have significant potential to promote environmental sustainability. If smart and sustainable urban planning can be promoted further across the world, urban centres could become key in the mitigation of climate change. Some suggest that cities can become important agents of change and hubs of innovation. Thereby, urban centres can facilitate the transition to industrial economies in the Global South. As emphasised by numerous participants, the ways in which urban centres develop in the future will have crucial impacts on development challenges. Numerous factors such as technology, climate change and demographics will shape and interconnect with urbanisation dynamics. As suggested by one participant, distinct dynamics of urbanisation in Asia and Africa will differ from the experiences in Europe in the 20th century. Processes will likely be much more disorderly and shaped by new technological

advances in yet unpredictable ways. They go on further to predict that vast social changes will be a consequence of urbanisation processes. Numerous participants highlight that development practitioners and policy makers should monitor and analyse these changes and dynamics carefully. While an attempt to control or regulate urbanisation will be unfeasible, participants still emphasise the need to focus on the further development of urban centres as well as the promotion of sustainable urban management, both in fast growing medium-sized cities and in metropolitan regions.



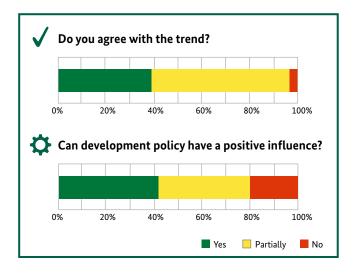
Cluster 4 Economic development, Poverty, Inequality, Health

While weak economic growth will persist, becoming the new global normal, the focus of the world's economic activity (the share of the global GDP) will shift to emerging market economies like China and India. Slow economic growth will result in the disruption of established economies due to shrinking workforces and high debt. To maintain living standards in established economies, productivity needs to increase. In developing countries, slow growth will threaten poverty reduction. Automation and other technologies will replace manufacturing jobs and will pressure governments to educate and train workers for engagement in new services and new sectors.

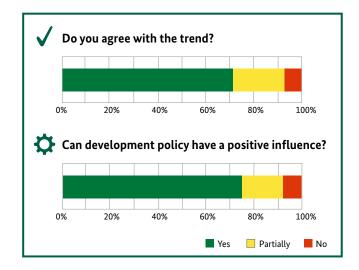


An increasing number of people will benefit from economic development.

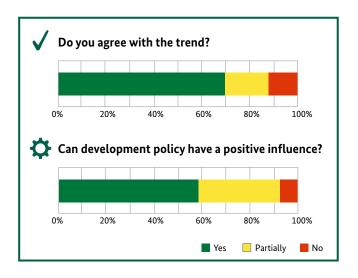
The centres of economic growth and innovation are likely to shift to the developing countries that manage to make use of the demographic dividend. The demographic growth and a young age structure of many developing countries will likely see the market for consumption also moving to developing countries.



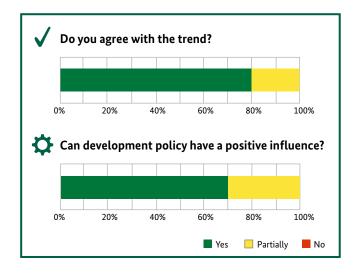
The overall number of those in **absolute poverty** will continue to fall. However, the future might see growing poverty, especially in fragile contexts where high population growth and slow economic growth prevail.



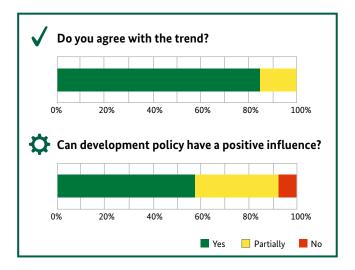
Levels of inequality within and between states are likely to increase. At the same time, broader access to information will lead to greater social awareness of inequality. Increased levels of inequality as a source of grievances and social unrest will jeopardise the social cohesion of communities. This may undermine positive development outcomes.



Medical progress will improve basic health services in all parts of the world. While only industrialised countries and some emerging economies will be able to fully benefit from the opportunities associated with new technologies, these technologies will also offer new opportunities for increasing access to and the capacity of surgical care in low-resource settings. Unequal access to health care within states will be a key area of concern.



The risk of outbreaks of **infectious diseases** and pandemics will be of concern in the future, due in particular to microorganisms' growing resistance to the most effective known medicines. Even if treatments and vaccines exist, response supplies for emerging resistant strains, mutating viruses or a pandemic may be inadequate. Other risk drivers are high population densities, global trade, people's mobility, and the ongoing weakness of public health systems and surveillance capacities in the world's least-developed and fragile states.



Summary of the discussion of experts



"Capitalism will have to reinvent itself."

"It's not just productivity that is important but the changes in social safety nets to facilitate more sustainable lifestyles that don't depend on consumption of goods but more on services and community contributions."

"Fragility is the new poverty reduction frontier."

Automation, its effects on productivity and the potential to make use of demographic dividends, among others, make it difficult to predict **economic growth levels in the future**. As suggested by one participant, they will make future trends of economic growth and development much more complex than currently anticipated. Some participants do believe that slow economic growth may become the new normal. Others alternatively suggest that automation might lead to higher economic growth levels through increased productivity. These productivity levels, however, might not translate into increased employment. In both cases, the new economic dynamics might require a reinvention of capitalism.

New **centres of economic growth and innovation** have and will emerge in developing countries throughout Asia and Africa. Opinions differ whether this constitutes a shift from the Global North to the South. As pointed out by

some participants, it remains unclear whether the current growth models in India and China will prove robust and replicable by other countries in the region. One participant suggests that African countries will become increasingly important in the emerging global economic landscape. As the world's last remaining new frontier for natural and human resources, the continent has the greatest scope and potential for rapid structural economic transformation and is poised to leapfrog into new spheres of technological progress and innovation ('Africa growth and rising scenario'). Here, one participant highlights the importance of economic diversification and industrialisation.

Participants note that automation and innovation will coincide with higher educational requirements for the labour force. As these will affect low-wage countries more than industrialised ones, advantages of the demographic dividend might be lost. In these cases, young unemployed

population groups with low job perspectives might engage in violence or organised crime and extremism. Some note that countries will need to reconsider their social security systems to curb an increase in volatility and shield their population from effects of technological change. Indeed, experts agree that perceived and actual levels of **inequality** will threaten social cohesion. Here, one participant suggests that inequality within states might prove the most explosive trend. Perhaps, for this reason, others consider inequality to be the most important development challenge next to climate change. Many concede that better data and analysis are needed to forecast future levels of inequality.

Equally difficult, is the ability to predict **future levels of poverty**. Some participants suggest that while poverty rates have fallen until now, they could be on the rise again in 2032. Possible drivers are vulnerability and fragility. Fragile states with stagnant growth and high fertility rates already dominate the current locus of global poverty. As laid out by one participant, the effects of climate change, conflict, disease and other risks might rapidly reverse advances in the fight against poverty if highly populated countries slide into fragility. As such, fragility will likely become the new frontier in the fight against poverty.

New diseases and pandemics will likely emerge and could have devastating effects due to, among others, increasing levels of antibiotic resistance. Some see climate change and increased humidity as one driver of the emergence of new infectious diseases and pandemics. Their reach will go beyond national borders and they will affect future mobility and security policy. As one participant predicts, the effects of obesity will also increase health risks in many parts of the world. Another participant urges to pay attention to the risk of the 'weaponisation' of biotechnology. Biotechnology is becoming more affordable and accessible, leading to the increasing difficulty of containing viral threats. Some participants further suggest that developing countries might

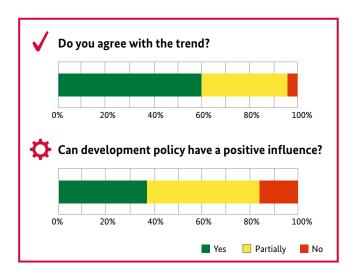
be susceptible to higher burdens of disease as they have greater health needs with poorer access to personalised medicine. How health systems will develop in the future is unclear. Some suggest that new technologies might reduce the costs of diagnostics and other treatments. 3D printing technology especially will create new and cost-effective opportunities in patient treatment. One participant underlines that beyond new medical technologies, developing countries will require improvements in essential medicines and primary healthcare such as child and maternal care to effectively address health needs.

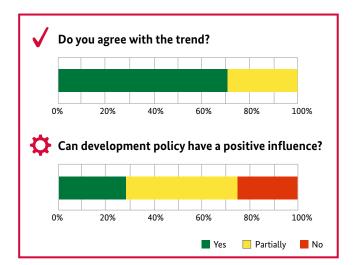


Cluster 5 Technology, Innovation, Future of work

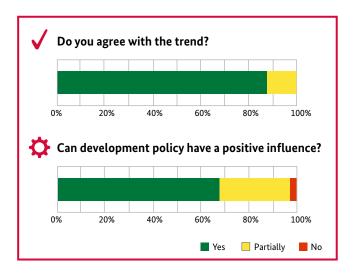
Technological progress, digitalisation, robotics and artificial intelligence will enormously affect social and economic development. Advances in these areas will make wide ranges of services more inclusive and accessible (e.g. access to information, bank accounts, mobile phones, money transfer, unmanned aerial vehicles [drones]). However, the digital divide both between and within states is likely to broaden as digitalisation advances, leading to the increased marginalisation of individuals who are not digitally connected. At the same time, individuals and states will become more vulnerable to the risks associated with encrypted communication and a lack of data security. Furthermore, it may become increasingly difficult for individuals who are not connected to obtain access to basic public services.

Automation will change work and greatly affect the needs and conditions of the labour market. About two-thirds of all jobs that currently exist in developing countries are at risk of being wiped out by automation. Some sectors, such as transportation and industrial production, will be more affected than others. New technologies will also support the development of new concepts and business models, which may potentially create new jobs, especially in developing and emerging countries (open manufacturing, sharing economy, etc.). The effects of these changes in the labour market will vary in scale and gravity between regions, countries and segments of society.

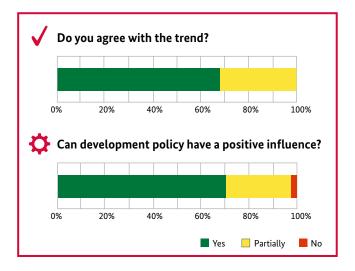




The changes in the labour market wrought by automation will create the need for new skill sets and thus adjusted education systems to supply them. While the impact of automation will vary largely from country to country, training and continuing education will be crucial in both developed and developing countries to adapt to the new labour market.



The labour markets will be characterised by the growing participation of women in the labour force. Participating in the labour market will increase women's self-confidence in all spheres of life and this will serve as an additional driver of socioeconomic development in the future. However, increased participation will most likely not lead to full gender equality in the workplace. Women will still have less access to economic opportunities than men do.



Summary of the discussion of experts



"How can you talk about education if you don't know where the jobs will come from?"

"If automation dominates, people will not be any more important as workers and governments may lose interest in investing in education and health systems for the large majorities."

Participants agree that technological progress, digitalisation, robotics and artificial intelligence will strongly shape and influence developments in all spheres of life. As such, technological progress presents one of the core drivers of change in the future. New technologies will allow for more localised and context-based production and fixes. Some participants even hypothesise that they could lead to a new era of localisation rather than globalisation in the future. It is clear that we do not yet grasp the full impact technology will have in the future. Participants therefore highlight the need to further analyse and monitor opportunities and risks associated with new technologies in different fields of work such as agriculture, energy and nutrition. While new technologies and digitalisation harbour clear opportunities for technological fixes, one participant emphasises that it is not a magic bullet per se. To harness advantages, states will need to put in place appropriate policies and adequate regulations, especially when it comes to cyber security. The influence of AI and robotics on the private sector, public service provision and regulations are also uncertain. Some

note that second order effects, in terms of regulations and laws for robots and the takeover of government functions by AI systems, will be particularly interesting.

As emphasised by some participants, we are already witnessing increased capacities for innovations through access to emerging technologies in numerous developing countries. Countries such as Brazil and Kenya are actively promoting tech-entrepreneurship through incubators and accelerator programmes. Some highlight that particular attention should be paid to the ways in which people in developing countries already use new technologies as well as how these shape new social realities. Given these current developments, many of the participants foresee a global **decrease in the digital divide.** It remains to be seen whether technological advances will be inclusive enough to also reach more marginalised groups within states that are not connected. As suggested by one participant, differences among generations could be a much stronger determinant for unconnected individuals.

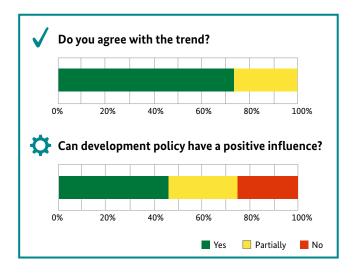
Some participants highlight that digitalisation will also increase the need for adequate **cyber security** in the future. As noted by one, data might become an increasing commodity and determinant of power. With the creation of cyber space, a new space for conflicts and attacks also emerges. Another participant suggests that these attacks could have network effects that are difficult to predict from a humanitarian perspective. The fact that it is difficult to identify the source of an attack will also decrease the ability to intervene and respond to these attacks. As observed by some, countries will consequently need to increase the provision of cyber security through among others, entering into cooperation on data security with other actors, collaborating on ICT policies and harmonising regulation.

In relation to automation and robotics, their effect on the nature of work is one of the core issues that participants have addressed. Work as a whole is likely to become more fluid and flexible. Some participants voice that women in particular could benefit from this changing work dynamic as it will create more opportunities for participation in the labour market that cater to those women who also assume key caregiver roles in their families and communities. Others, however, believe that social discrimination against women will likely continue in developing countries through continued wage discrimination and vulnerabilities at the work place. While it is evident that automation will lead to a restructuring of the labour market, it is highly uncertain what the scope of this change will be. Transitions will be gradual and should be strongly monitored. Many participants believe that automation will replace cheap labour, adversely affecting developing countries with a relative abundance of low-skilled labour. With fast changing education requirements for jobs, it is unclear whether countries will be able to cope with the transition. To respond to changes in the labour market, states will

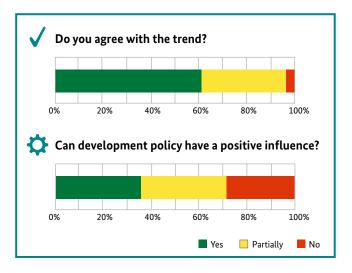
have to reform education systems drastically. Furthermore, some participants highlight the need for governments to redesign and even revolutionise social security systems. Companies and industry stakeholders need to be involved in formulating future policies for different countries to match the skills needed. Development policy makers need to analyse how these dynamics will unfold uniquely in individual countries.



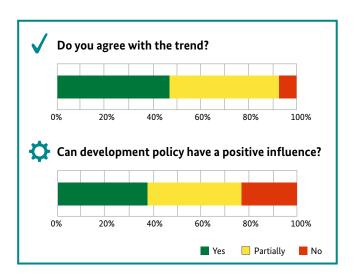
Empowered by the changes in technology, the information environment and their wealth, citizens will pressure their governments to sustainably improve living conditions. Particularly the growing middle classes in the urban areas of developing countries and emerging economies will demand that their governments provide security and prosperity and act on issues such as severe air and environmental pollution and the traffic gridlock that contributes to it. The parameters of the social contract between states and their citizens need to be renegotiated, and established patterns of governance will need to be adapted.



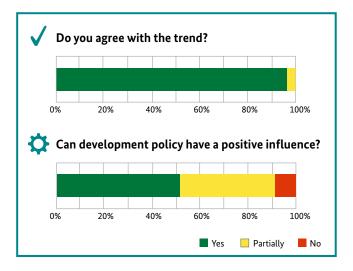
The trend of rising nationalism and fragmentation is likely to further disrupt a clear and established international order and will decrease cooperation at the global level. The increasing nationalism and populism exemplified by the Trump Presidency and Brexit may be further fuelled by slow economic growth, the disruption of job markets through automation and the changing information environment contributing to tensions between countries. Even if these nationalist tendencies do not last, they will have long-term effects.



Authoritarian and non-democratic reactions will become more widespread as governments increasingly struggle to meet the demands of their citizens to provide security and prosperity. The impact of such reactions on the future role of civil society could be a narrowing of civil society's scope of action in some parts of the world. However, at the same time, the increasing self-confidence of civil society and the availability of new means of participation may increase civic engagement.



Fragile and conflict-ridden countries and the weak institutions of many states represent key obstacles to realising sustainable development in future. The existence of fragile countries will also continue to threaten the stability of these countries' wider regions. In many places, the coexistence of fragility and conflict may perpetuate chronic poverty, and the cocktail of poverty, inequality, environmental degradation and resource scarcity may further fuel existing conflicts.



Summary of the discussion of experts



"Even though the space for civil society is in many ways now limited, it is also an important part of the trend that the number of civil society organisations have never been higher."

"Ill-used technology can also lead to more control on citizens and less liberty."

"Conflict as a state characteristic is on the decline globally."

Participants agree that citizens will voice stronger demands for improved living conditions in the future, while states will find it more difficult to meet these growing demands. The resulting tension will significantly alter the nature of citizen-state relations and could lead to a revision of the social contract. How this change will occur is still uncertain. On the one hand, participants suggest that increased civil pressure will heighten tension. Here, authoritarian states and democracies could use technologies to curb civil liberties. If met with authoritarian responses, a rise in active political participation will likely coincide with the establishment of authoritarian regimes rather than Westernstyle democracies. On the other hand, others believe that with the emergence and use of alternative platforms for public service provision, the state could become less relevant. In many countries, citizens already rely on private

sector suppliers or crowd-sourced bottom-up solutions for the provision of services. In this second scenario, citizens might take advantage of more autonomy to self-innovate. As put by one participant, this slippery trend will need careful monitoring. Further, participants highlight cultural and religious differences between peoples that will shape the distinct political dynamics in individual countries. New technologies are also named as a strong driver. They present opportunities for greater civic engagement and political participation and could further increase pluralism in political party landscapes. Participants describe potential risks as including the use of technologies for surveillance, oppression and citizens' control, leading to a shrinking space for civic engagement. Increased authoritarianism and civil society awareness are likely to coexist in the future.

Individual participants stress that values, identities and history will continue to shape political dynamics. While some hope that current nationalist tendencies will result in a strong counter-trend, nationalism and populism will likely continue to influence the world in the future. Effects of automation on the labour market, perceived inequality and aversion to otherness will fuel nationalist tendencies. This could particularly influence the will to cooperate on a global scale to tackle developmental challenges. As indicated by one participant, long-term effects of nationalism would be much more severe for the West, which has built an international world order that fundamentally emerged from a narrow nationalistic focus. Even though nationalists and populist politics will have long lasting effects, some participants predict that these will be met by increasing anti-nationalist movements and the emergence of global strategies to counter populism. Beyond nationalism, we might witness a general rise in identity politics in the future, where politicians increasingly run on issue-based platforms.

State fragility will remain a key development challenge in the future. Some participants highlight that the state is extremely weak in many Sub-Saharan African countries but also in the Middle East and has limited capacities to provide security for its citizens. In addition, one participant suggests that currently stable countries might slide into fragility through effects of environmental degradation and economic transformation among others. On a more positive note, strong, stable neighbouring states and diaspora communities might foster increased stability in fragile states, creating a virtuous upward spiral.

Interconnectedness of trends

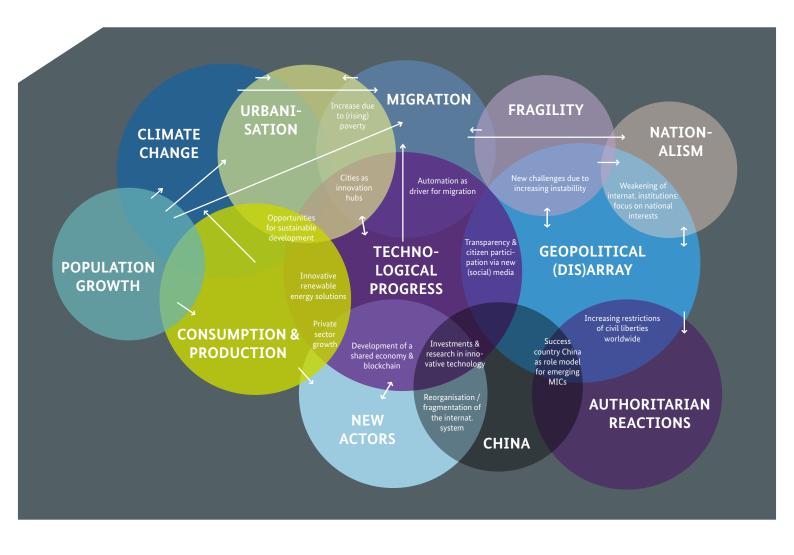


"We should pay close attention where drivers and trends come together and intersect. This is where things are happening."

Numerous factors included in the trends and discussion are crosscutting and interdependent. The world in 2032 will be a dynamic space of transformation where numerous factors interact. Depending on how interactions unfold, the world will face entirely new challenges. Coinciding with this, new opportunities to tackle challenges and foster more development might also arise. The subsequent figure attempts to visualise some of the possible interactions between the trends introduced in this discussion paper.

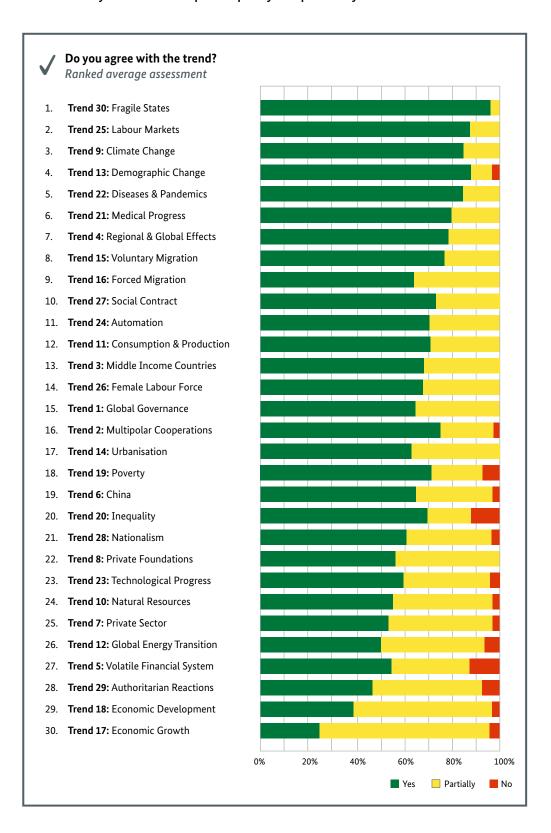
The figure illustrates that trends with the strongest effects are technological progress and global disarray: Technological progress such as automation and the increasing use of AI emerged as one central crosscutting factor that could influence virtually all trends in the future in unpredictable and unprecedented ways. On a positive level, it will bring about new actors and create new opportunities for tackling a host of developmental challenges. Many factors such as the shifts in the global balance of power towards China will also shape geopolitical dynamics. Nationalistic tendencies to withdraw from international cooperation, growing instability and fragility, among other factors, will transform the geopolitical order. A reshaped geopolitical order will further influence the ability to tackle developmental challenges, matters of fragility and authoritarian reactions.

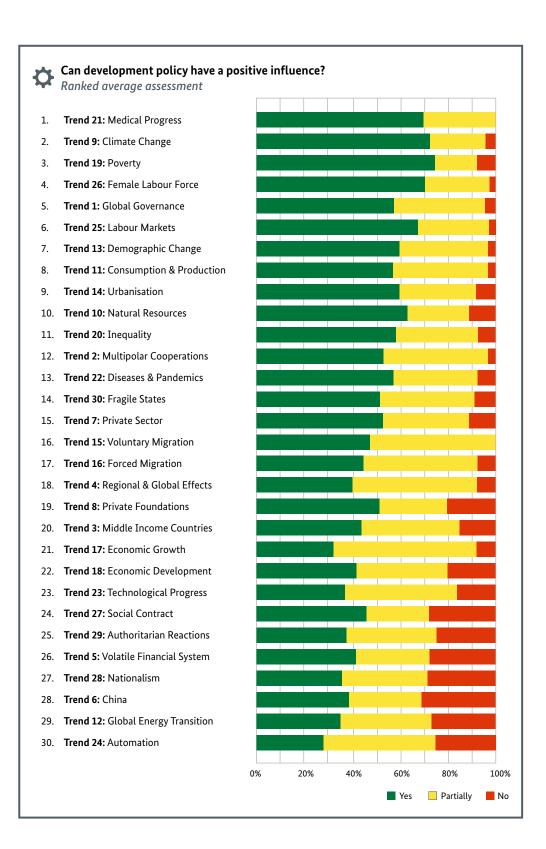
Dynamics of population growth and urbanisation will influence each other but are likely to also shape consumption and production patterns. Population growth could exacerbate the effects of climate change. At the same time, environmental degradation and disasters might also slow population growth in affected areas. These points only outline some of the possible interactions that will shape the world in 2032. It is important to highlight that the actual effects and interactions will likely be more ambiguous and complex than envisioned at this point. As strongly urged by the Delphi-participants, policy makers, development practitioners and other actors should consequently invest time and resources into carefully analysing and monitoring these and other factors and pay close attention to the drivers of particular developments.



Overview of ranking

To allow for a comparative analysis of the trends as evaluated by the experts, this section presents a ranked overview of the participants' assessment of the trends and the extent to which they believe development policy can positively influence individual trends.





Implications for the future role of development policy



"Development policy needs to embrace uncertainty and unpredictability, and rely a lot less on projection of 'old data' (statistical data from the past) to 'predict' an unpredictable, ambiguous future."

Development policy will need to devise new strategies and interventions to respond effectively to new and complex challenges in the future. This section provides inputs from the expert discussions for reflection, potential adjustments and a rethinking of development policy along four key pillars: change of paradigm, analysis and research, development measures, and (new) partnerships and collaborations.

Change of paradigm

As emerged from the Delphi process, an effective response of development policy to new global challenges will require a paradigm shift. Through growing interdependencies and the uncertainty of developments, such as the impacts of new technologies, regional and global challenges will become increasingly complex. To address these challenges, participants emphasise the need for collective and coordinated action. They highlight the promotion of **policy** coherence as one major sphere of influence for development policy. Policy actors and practitioners in the Global North especially, should lead by example and implement existing frameworks for coherent action through joint efforts across ministries and policy fields ('walk the talk'). Development policy should bridge and be more coherent through other national policy levels such as foreign affairs, security, trade, environment and migration policy. Here, one participant proposes that development policy could also assist other ministries in recognising the implications

and linkages between their work and progress in global agendas. To gain support on the national level and counter nationalistic tendencies, some suggest that development policy should be further rooted in the national interest and that the benefits and achievements of development policy should be communicated clearly.

Broad alliances with a range of actors are also seen as important to achieve global agendas. Therefore, development policy should also rethink its approach to working with other donors, private sector actors, philanthropists and other emerging actors. Given the rising plurality of actors, many participants see one potential role of development policy in becoming a convening and coordinating body. Thereby, development policy could promote collective action and concerted efforts that will be necessary to tackle new complex challenges. For instance, participants describe that development policy could support the emergence of

new global governance mechanisms by supporting the formulation of rules of engagement.

Many participants believe that development policy could contribute to **strengthening the existing multilateral system** by providing credible responses to challenges and by achieving results for global agendas such as the 2030 Agenda. Some further state that in case the **multilateral system is weakened**, development policy can support the creation of stable alliances with like-minded countries and other actors around specific issues and interests.

Development policy should also adopt a **differentiated approach to different country groups**. As suggested in this survey, it should continue to focus on and intensify its efforts on poverty reduction in low-income countries (LIC).

Many participants expressed that fragility will likely become the new poverty reduction frontier. Thus, they believe that development policy should focus on building resilience against conflict and external shocks in LICs. For MICs that have recently graduated or will graduate from the OECD Development Assistance Committee (DAC) list of Official Development Assistance (ODA), participants suggest that development policy should design **gradation** mechanisms that promote a sustainable pathway. As highlighted in the discussion of the trends, the support and engagement of MICs will be crucial for achieving global agendas and promoting public goods. Some further propose that development policy actors could use these mechanisms as well as global governance and dialogue to engage MICs pro-actively in the promotion of global public goods and the mitigation of global public bads.

- How can policy coherence between different policy fields and ministries be put into practice? How can implementation of coherent approaches and programmes be ensured ('walk the talk')?
- How can development policy effectively promote global agendas, strengthen global governance mechanisms and the multilateral system in times of increasing nationalist tendencies?
- What could successful partnership approaches between countries and different actors look like to promote global public goods at global and regional levels? In which areas would it be suitable to engage in issuebased alliances?
- How can middle-income countries be supported in an ODA graduation process and how should possible

- gradation mechanisms be designed to ensure a sustainable pathway?
- How can high-income and middle-income countries adapt sustainable production and consumption patterns to live up to expectations of sustainable development agendas ('lead by example')?
- How should development policy tackle poverty and inequality especially within countries? Should development policy focus on low-income countries only, or also on MICs characterised by high numbers of poor people?
- How should development policy incorporate that fragility will become the new poverty reduction frontier?

Analysis and Research

The need for increased analysis, research and monitoring capacities is one of the key themes that emerge from participants' suggestions for the future role of development policy. Since the direction of changes will be highly uncertain and difficult to predict, it is necessary to consistently monitor and analyse the dynamics of change. In particular, development policy will require increased analytical capacities to be able to track and understand complex developments and their underlying drivers. For instance, as indicated by some, countries might experience increased economic growth and productivity levels through automation but have continued low rates of employment. To assist countries in responding to these new challenges proactively, policy makers and practitioners need to monitor dynamics of economic growth, productivity and the future of work.

Participants highlight that factors of uncertainty and unpredictability must be integrated into policymaking. Some note that key uncertainties and intangible drivers such as the impact of virtual interactions on value and identity formation need to be considered in analytical work and the formulation of strategies. Preparedness and anticipation of multiple unexpected but plausible futures will be key. To be able to translate this into action, participants emphasise that the system of development cooperation will need to become more accommodating. An

adequate factoring in of uncertainties needs to recognise the speed of developments and ensure that a flexible and adapted response is possible. For instance, technology and digitalisation will move much faster than can be captured in multi-annual strategies and frameworks.

To this end, one suggestion is that development policy should institutionalise future trends analysis and strategic foresight to inform longer-term planning and the development of new policies such as adapted economic models. Beyond their own analytical capabilities, development policy actors can play an important role in supporting other countries in the recognition and analysis of future trends and their ability to prepare, plan and develop appropriate policy responses. Many participants also emphasise that focus should be placed on collecting better and more relevant data on which countries can base their policies and strategies. In particular, development cooperation can support countries in acquiring capacities for data collection and analysis techniques. With regard to other fields, participants mention new technologies as key opportunities to improve data collection and analysis techniques. Here, development policy could explore the use of emerging technologies such as drones, smart grids and blockchain technology in the monitoring and analysis of developments. One participant further notes that development policy could promote access to high quality data as a global good.

- In turbulent times, how can processes around trends analysis, scenario planning and strategic foresight be integrated into development cooperation, strategy development and policy formulation?
- How can countries be supported to better monitor and understand trends and their drivers to build adequate policies and systems around them?
- How can the quality of and access to data be improved for e.g. the analysis of developments, policy formulation and planning? In what ways could new technologies and digital transformation be harnessed to improve this access and quality of data?
- Which processes are needed to better understand the nature and impact of intangible drivers that accompany technological change and a virtualising world?

Development measures

Development policy will also have to adapt its operative capabilities and **development measures**. As in analysis, research and strategies, flexibility also needs to be integrated into these measures. While large evidence-based interventions are desirable, they will no longer be the clear cut suitable responses to all challenges. As emphasised by some participants, flexible interventions that use an **approach based on trial and error** are needed to address complex challenges, such as fragility, as well as to cooperate and engage with emerging economies. Participants here highlight that interventions also need to adapt their design to the concrete contexts of individual countries and regions that reflect tangible developments and recognise intangible drivers.

In terms of platforms of engagement, many participants stress that fighting inequality, especially within countries, should be one focus area of development cooperation as inequalities will be at the core of many uncertain developments. Here, development practitioners need to explore how they could contribute to foster social cohesion. To reduce fragility and instability, development measures should focus further on building resilience within fragile states and in neighbouring countries. Also key is preventing conflict through approaches that reflect new drivers of instability in the target countries. Many participants highlight that multi-pronged and whole of government approaches are needed to address fragility effectively. Participants also suggest concrete development measures such as the developing and strengthening of social safety nets, education and job security to reduce the vulnerability of citizens while building up state and peace-building initiatives. One participant further deems a focus on cities is crucial as prosperous and stable urban centres could have positive spillovers on the rest of the country.

The majority of participants see emerging technologies and digitalisation as one of the strongest drivers of transformation in all spheres of life. Participants therefore highlight the need to factor in the risks and opportunities provided by new technologies in development measures as well as to test and adopt technical solutions where feasible. Here, numerous areas are identified in which development measures could integrate the use of technologies for higher impacts. For instance, one participant suggests the use of blockchain technology to increase the transparency of global value chains and promote the sustainable use of natural resources. Others point towards the use of new technologies to promote the local production of goods. As suggested by one participant, in all cases development measures could harness these new opportunities by making use of increasingly cheaper technologies to promote better, cheaper, faster and more scalable measures that can be implemented from the bottom-up. Beyond the use of technology for higher impact, some also emphasise that development measures can be employed to promote an inclusive digital transformation. For instance, one participant highlights the need for interventions that help develop innovation hubs and digital ecosystems in the Global South, enabling countries to harness new opportunities for growth and development. Furthermore, many suggest that (digital) development interventions should target marginalised groups who are not yet connected. Development measures can also be used to assist developing country governments in the formulation and implementation of national policies that introduce adjustments necessary to tackle negative effects of technological change. Participants believe that development measures can offer particular support in adjusting education and employment schemes to the changing requirements of labour markets.

- Which policy responses and methods are needed for development cooperation to become more flexible, quicker and adaptive in a world characterised by increasing uncertainties? How can more "trial and error" approaches be realised?
- Which types of approaches are needed to effectively prevent and stabilise fragile states and reduce poverty in fragile countries? Which actors does development cooperation need to work with in fragile states without reinforcing or legitimising bad governance and authoritarian regimes?
- How can equal and greater access to the opportunities of technological advances be ensured? How can development cooperation promote inclusive digital transformation within countries, especially for marginalised groups?
- Which adjustments in the development cooperation portfolio are needed to face the challenges that come with technological progress and result in aspects regarding the future of work and changing labour market?
- In which ways can development cooperation use technological progress to achieve greater impact?

(New) Partnerships and Collaborations

Finally, participants urge policy makers and development practitioners to rethink their approaches to partnerships and collaborations and find ways for constructive engagement with, among others, the private sector, civil society and philanthropic organisations as well as emerging actors such as online-communities. Particularly regarding the private sector, participants believe that new and closer forms of engagement with entrepreneurs and start-ups are crucial to design more innovative and agile approaches to development challenges and increase innovation capacities among development practitioners. Some emphasise that development practitioners will need to adapt their forms of engagement to actors such as social entrepreneurs, startups, cities as well as online-platforms. For instance, one participant suggests that modes of cooperation will need to become less bureaucratic. Some also state that real dialogue between all actors needs to be promoted which both will require active listening and understanding of all actors involved.

Due to the restructuring of cooperation forms and governance mechanisms, development policy actors will need to **engage with different initiatives on multiple intervention levels.** As highlighted by participants on many occasions, development practitioners and policymakers need to promote collective regional and global efforts to ensure the successful implementation of global agendas. Where this

is not possible, participants propose that development policy can flexibly enter into issue-based alliances with like-minded actors to promote advances on specific challenges. In particular, development policy should actively explore and build experience in supporting South-South and triangular cooperation. These formats could also be particularly relevant for the engagement of MICs in global agendas. As one participant suggests, development policy should focus on fostering opportunities for joint learning, consensus building as well as participation and ownership of MICs in development debates at a global level.

Development practitioners must also monitor changes in global governance and enter into dialogue with new and emerging state players. Many participants highlight that this also entails the cooperation with China on global as well as regional issues where synergies and cooperation can lead to higher impacts. Some suggest that policy makers should particularly engage with newly created institutions as well as AIIB to promote increased synergies. Cooperation within countries, e.g. in Sub-Saharan Africa and Asia, should equally be fostered. Furthermore, participants urge that new forms of cooperation with China and other emerging actors should centre on fostering synergies and building on each actors' strengths to address distinct development challenges at country level effectively.

- How can partner orientation, ownership and alignment with countries' strategies be fostered within a framework in which challenges are increasingly of global and regional nature?
- How can development cooperation engage with (new) actors such as online-platforms and (digital) start-ups within the framework of SDG partnerships between countries?
- What instruments and mode of cooperation are most suitable to work with MICs and emerging economies?
- Which mechanisms and forms of collaboration are beneficial to work with China in different regions and countries (e.g. alongside One Belt One Road Initiative, Central Asia and Sub-Saharan Africa)?

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