Background note - Lab Debate D4, European Development Days 2017

Territorial Innovation Policies and Smart Specialisation: a promising area for Africa-EU cooperation

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Debate D4

Session official title & sub-title: Territorial innovation policy: the promising area for Africa-EU cooperation - Towards African smart specialisations? Opportunities and challenges for an innovation-led, sustainable and inclusive development

Forum Theme and Topic: Investing in Prosperity – Domestic Resources Mobilization

Date and place¹: 8th June 2017, 10h40, Brussels, Belgium

Session link: https://www.eudevdays.eu/sessions/territorial-innovation-policy-promising-area-africa-eu-cooperation

The debate is organised by the European Commission, DG JRC (Joint Research Centre), with the official support of the African Observatory of Science Technology and Innovation (AOSTI), the Intellectual Property Office OIPI CI (Ivory Coast) and the National Polytechnic Institute Houphouët-Boigny (Ivory Coast).

The exchanges with stakeholders will go on at the DG JRC Stand on 8th June from 14 to 16 pm.

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"The scale and ambition of the Sustainable Development Goals require innovation in development and innovation for development." (UNCTAD 2017)²

1. Context and main aim

Among the 17 Sustainable Development Goals of the 2030 Agenda³, the **SDG 9 - Industry, Innovation and Infrastructure** – requires countries, independently of their development stage, to **Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation**. At the African Union (AU) and the European Union (EU) levels,⁴ the importance to set up innovation-enabling environments is also considered as a fundamental condition for the achievement of a sustainable socio-economic development.

Bringing together the major international development actors from more than 150 countries, the European Development Days 2017 offers a unique and timely Forum to promote new partnerships and innovative solutions to global and social challenges.

This 11th edition comes ahead of the 5th Africa-EU Summit, planned in November 2017. The Summit provides a critical opportunity for the two continents to redefine and strengthen the Africa-EU partnership. In the perspective of a novel Joint Africa-EU Strategy,⁵ the European Commission has recently released the communication « For a renewed impetus of the Africa-EU Partnership »,⁶ which aims at informing the next year negotiations of the EU partnership, in particular the Africa pillar.

In this context, the debate on - Territorial Innovation Policy and Smart Specialisation: a promising area for Africa-EU cooperation — is organized by the DG Joint Research Centre (DG JRC) of the European Commission. With a special focus on the SDG 9, it aims at novel and mutual learning approaches to invest in territorial development, through place-based and inclusive innovation policies. It contributes to the international cooperation activities of DG JRC in the design and implementation of research and innovation strategies for smart specialisation (RIS3). Focusing on the innovation-enabling governance systems, it complements the thematic actions promoted by the High Level Africa-EU STI policy dialogue (Africa-EU Science, Technology & Innovation portal at http://www.rinea.org/en/589.php) under the Joint Africa-EU Strategy.

Acknowledging the importance of sound innovation governance systems and policies, the session prompts a debate on the opportunities for African countries to set up tailored territorial innovation policy and on the relevance of the European and international experiences of Smart Specialisation in informing such exercises. Moreover, this debate also calls for more concrete Africa-EU collaborations in the design and implementation of place-based innovation policies in view of achieving a more sustainable and inclusive economic development.

² New innovation approaches to support the implementation of the Sustainable Development Goals (UNCTAD/DTL/STICT/2017/4)

³ http://www.un.org/sustainabledevelopment/sustainable-development-goals/

⁴ African Union's key documents at https://au.int/en and European Union's documents and publications at http://europa.eu/european-union/documents-publications en

⁵ The JAES was launched at the Africa–EU Summit in Lisbon in 2007, see at https://ec.europa.eu/europeaid/regions/africa/continental-cooperation/joint-africa-eu-strategy en

⁶ SDW(2017) 150, SDW(2017) 151 final at https://ec.europa.eu/europeaid/news-and-events/proposal-renewed-impetus-africa-eu-partnership en

2. Territorial Innovation Policy (TIP) in brief⁷

Innovation policies may refer to the public interventions (for instance, laws, regulations and institutions), that aim at supporting the generation and diffusion or innovations – i.e. new or significantly improved products, processes, marketing or organisational methods, new collaborative modes with external actors -. Often designed at the supra-national, national or regional policy levels, territorial innovation policies (TIPs) would mainly target the strengthening of the innovation capabilities of "local" actors. In the broad perspective of territorial development, TIPs would also be expected to contribute to the sustainability and resilience in terms of economic, social, environmental and cultural characteristics (see online CEMAT 2007, Spatial development glossary, n° 2).

TIPs could engage different types of actors such as innovative firms, universities and public research institutes, research and technology organisations, as well as public policy actors involved in the governance of learning and innovation systems, i.e. the systems of organisations and institutions involved in the generation and diffusion of knowledge and innovations. Although various approaches to innovation policy exist, they can be classified in three generic types: (i) policies targeting specific industries (vertical policies); (ii) policies aiming at improving the conditions for innovation or framework conditions (horizontal policies or without ex-ante specific sectoral focus) or (iii) mixed policy approaches.

The implementation of TIPs can rely on a wide range of instruments including, for instance, the direct and indirect funding (loans, grants, tax credits, innovation vouchers, venture capital for innovative start-ups and entrepreneurs etc.), the creation of thematic/topical clusters, the provision of entrepreneurial and innovation management training, of market intelligence, technical and international promotion services, the access to external and international knowledge sources, the support to knowledge, science and innovation networks and to intellectual property protection (e.g. patents, trademarks, designs, copyrights, geographical indications), as well as measures to stimulate the demand for innovation (see e.g., Compendium of Evidence on Innovation policy, http://www.innovation-policy.org.uk/compendium/ and Innovation Policy Platform of the World Bank and OECD, https://www.innovationpolicyplatform.org). The impacts of the public intervention for innovation will differ according to several factors including, the design, implementation and goals of the policy, as well as, to a wide range of socio-economic characteristics of the target economic territory. Public intervention for innovation can yield significant impacts, for instance in terms of increased innovation and R&D activities of local firms, enhanced provision of skills for innovation, improved access to expertise and relevant knowledge, and to knowledge sharing and networks for innovation and strengthened local innovation systems and clusters.

Useful documents and links for dedicated reports and statistics of research and innovation in Africa:

African Observatory of Science, Technology and Innovation (AOSTI), http://aosti.org/

African STI Policy Initiative, http://www.unesco.org/new/en/natural-sciences/science-technology/sti-policy/africa/launch-of-the-african-science-technology-and-innovation-policy-initiative/

New Partnership for Africa's Development, http://www.nepad.org/resources

UNECA, http://www.uneca.org

World Bank (2010). Innovation Policy: A Guide for Developing Countries. World Bank

(https://openknowledge.worldbank.org/handle/10986/2460)

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⁷ This section provides generic and non-definitive definitions and insights for non-specialists. For more complete and operational aspects about the Innovation policies and its territorial dimensions, the readers are strongly encouraged to look at the references provided.

3. Strategies for Smart Specialisation (S3): an overview of the approach

Research and Innovation Strategies for Smart Specialisation (RIS3 or S3) are industrial and innovation frameworks. They aim at guiding the organisation of resources for innovation in order to trigger the transformation of industrial and socio-economic structures related to a given territory (e.g. region or country). In the EU, the S3 approach has been promoted under the Cohesion policy, which main aim is to reduce the socio-economic disparities between the EU regions. In this context, the Smart Specialisation Platform, S3P (http://s3platform.jrc.ec.europa.eu) provides advice to EU countries and regions for the design and implementation of their S3.

In essence in the S3 approach, the resources for R&D and innovation should be oriented towards a limited number of priority areas to build up sustainable competitive advantages. These priority areas should be identified through evidence-informed and participatory processes involving actors from the quadruple helix – Industry, University and Research centre, Government and Civil society (users, citizens) –. The interactions among the different stakeholders and levels envisaged in the S3 approach also intend to limit ex-ante picking-the-winners or an exclusive support towards incumbent firms. More than a set of TIP instruments, the S3 approach offers policymakers and local actors with novel principles to think, design and practice innovation-led development strategies. Key to the approach is the design of place-based strategies, as means to mobilize local resources and entrepreneurs and to focus on local challenges in order to identify unique opportunities for economic development.

The implementation and execution of S3 involve six steps, in practice sometimes overlapping (see the RIS3 Guide 2012 for details)⁹:

- 1. Analysis of the territorial context through a SWOT analysis, entrepreneurial dynamics and potential for innovation
- 2. Setting up a RIS3 governance structure that ensures participation and ownership (for instance, steering group, management team, etc.)
- 3. Elaboration of an overall vision for the future of the territory
- 4. Identification of priorities through a mixed top-down and bottom-up approach
- 5. Definition of coherent policy mix, roadmaps and action plan, which allow for experimentation through pilot projects (related to the priorities selected)
- 6. Establish monitoring and evaluation mechanisms, which should be integrated in the strategy and its components from the early elaboration phases.

Importantly, the elaboration of an S3 should be considered as a learning process; in the same manner, the priorities can be revised and are expected to be, for instance, through multiannual plans.

Adopted and adapted by more than a hundred of EU regions, the early S3 experiences have allowed the development of new and more inclusive processes, as well as insightful comparative exercises for the identification priorities and for the design of tailored governance mechanisms (see the Smart

⁸ For an example of RIS3 logic of intervention, see Gianelle and Kleibrink 2015, http://s3platform.jrc.ec.europa.eu/documents/20182/114948/JRC95458 Monitoring Mechanisms S3 Policy B rief.pdf/ce74fd68-cd17-4574-950d-4551582655d2

http://s3platform.jrc.ec.europa.eu/-/guide-on-research-and-innovation-strategies-for-smart-specialisation-ris3-guide-?inheritRedirect=true

Specialisation Platform and *Implementing S3*, A Handbook¹⁰). Inspired by the European experiences, the approach to TIP promoted by S3 is granted an increasing attention and has already prompted many initiatives well beyond EU borders.

Research and innovation policy is an important collaboration area with EU neighbouring countries and Innovation Strategies for Smart Specialisation feature among the priorities for the assistance to enlargement countries (see *S3 beyond EU* at http://s3platform.jrc.ec.europa.eu/s3-beyond-eu). A pilot project on Serbia, Moldova and Ukraine has been recently launched to support participatory and evidence-based processes outside the EU for the development of innovation strategies for smart specialisation.

Under S3 worldwide (http://s3platform.jrc.ec.europa.eu/s3-worldwide), a dedicated report on Innovation and regional specialisation in Latin America analyses examples of implementation strategies in Mexico, Colombia, Brazil, Chile, Peru and Argentina. The study indicates that several regions of Latin America are indeed conducting pilot activities, which aim at testing the adoption of the smart specialisation approach according to their own territorial and socio-economics characteristics (the study is available at https://ec.europa.eu/jrc/en/publication/innovation-and-regional-specialisation-latin-america).

Finally a recent note of the author¹¹ introduces an initial reflection on the relevance of the S3 approach in informing and challenging TIPs making in Sub-Saharan Africa countries. In this perspective, a main medium-term objective of this debate is also to contribute to launching an official policy dialogue and to set the grounds for potential Africa-EU collaborations in the area of territorial innovation policies and smart specialisation.

4. What do you think: African-designed R&I strategies for Smart Specialisations?

The African Union Agenda 2063 underlines the need to "catalyse education and skills revolution and actively promote science, technology, research and innovation, to build knowledge, human capital, capabilities and skills required to drive innovation". In this session, the importance to elaborate an innovation-enabling environment in order to meet the SDG 9 is acknowledged, consistently with the AU vision for innovation (see also the Science, Technology and Innovation Strategy for Africa 2024, STISA-2024 in AU's key documents).

A broad starting point of the discussions is that the SDGs can be achieved more effectively through the design of novel, tailored and more strategic approaches to territorial innovation policy in African countries. In the current global context, a key challenge is to ensure that such policies favour a more sustainable and inclusive territorial development, through the mobilization and effective use of *relevant* resources.

Inspired by the EU and worldwide experiences, the debate will address the potential of the framework offered by Innovation Strategies for Smart Specialisation or of the S3 approach for organising local

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 $[\]frac{10}{11} \underbrace{\text{http://s3platform.jrc.ec.europa.eu/s3-implementation-handbook}}_{11}$

http://s3platform.jrc.ec.europa.eu/documents/20182/217512/Smart specialisation in Sub Saharan Africa Introductory note.pdf/2e3565f8-4732-4dc1-a0ed-1b6ead43c4d5

innovation governance systems in Africa. Doing so, it also tackles the challenges and opportunities for the development of collaborative and mutual learning exercises in the design and implementation of S3.

Speakers – Ms Dosso Mafini (European Commission, DG JRC), Mr Ladrix Carlos (CORFO, Chile – Director of Strategic programs), Ms Luca de Tena Soledad (Consultant, Renewable energy, South Africa), Mr Ntale Alex (CEO, ICT Chamber Rwanda); Mr Rodriguez-Clemente Rafael (CSIC, Spain) -, moderated by Ms. UZO Madu (Producer & presenter, WIIFA), are expected to address the following questions¹²:

♣ Which governance structures or approaches are needed to guide an effective mobilization of domestic (and non-domestic resources) for the development of Africa-made innovations?

Note:

Speakers are expected to clarify the resources to which they refer to. Sectoral experts are expected to elaborate more from specific industrial needs.

Which lessons could be drawn from the Smart Specialisation experiences in the EU and worldwide for the design and implementation of TIPs in Africa?

Note:

See the links provided in section 2 for references to EU and international collaborative initiatives. Experts are also expected to opinion on the appropriate territorial policy levels for potential Africandesigned Smart Specialisation Strategies

↓ How can the S3 approach help African policy makers to leverage on the existing community-led initiatives in order to design a better tailored support to local entrepreneurs and innovations in Africa?

Note: Community-led initiatives refer, for instance, the private sector', civil and scientific communities' initiatives.

♣ Special Lab debate D4*: Sustainable Development Goal question (SDG question)

How to enhance the collaborative and mutual learning initiatives between African and European innovation policy stakeholders for the achievement of the SDG 9?

Note:

A key aspect of the SDG 9 is to encourage innovation and develop an innovation-enabling environment.

* Suggested by the organiser, the SDG question intends to further frame the debate and the Speakers' answers in the broad context of the EDD 2017 (#Sustdev).

¹² Short and concise answers are expected to leave, insofar as time would allow, more room to the interactions with the audience on site and online (see section 5. Additional questions to Audience)

5. Additional questions to be integrated to the EDD App for the Audience

Multiple Choice questions for audience

- 1. Which of the 3 approaches is the most appropriate for the design of Innovation policies in Africa?
- a. Top down or centralized
- b. Bottom-up or decentralized
- c. Mixed approach
- 2. At which territorial level the Smart Specialisation approach (participatory approach to the identification of priority areas for innovation) would be relevant in the African context?
- a. Country
- b. Region
- c. Urban
- 3. Which of these 4 propositions could reflect an order of importance of the obstacles to Africa-made innovations?
- a. Promotion of local innovations, Funding, Training, Access to knowledge
- b. Training, Access to knowledge, Promotion of local innovations, Funding
- c. Funding, Training, Access to knowledge, Promotion of local innovations
- d. Access to knowledge, Promotion of local innovations, Funding, Training

Word cloud questions (one-word answer) for audience

- 1. What is the main obstacle for the Design of Innovation Policies in Africa?
- 2. What is the main obstacle for the Implementation of Innovation Policies in Africa?
- 3. Which resource should be mobilized, in priority, for the uptake of African innovations?

6. Post-debate Perspectives

In the medium and longer terms, the debate and the related exchanges are expected to:

- Propose novel collaborations in the area of Territorial Innovation Policies and Innovation Strategies for Smart Specialisation for a renewed impetus of the Africa-EU Partnership to be discussed at the 5th Africa-EU Summit in November 2017
- Raise the awareness about the need to strengthen local capabilities in territorial innovation policy making and implementation
- Contribute to the Africa-EU cooperation in the design of sound governance and monitoring systems to support local entrepreneurs and innovations
- Improve and extend the partnerships and experiences sharing with African national and continental institutions to monitor best practices in innovative territorial policies, including urban policies