

**Draft:**  
**Innovation and Technology Transfer: Lessons from the CARIFORUM EPA**  
**Experience**

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## **1. Executive Summary**

CARIFORUM States are small, highly open, vulnerable, service economies with limited production capacities and that are carrying high external debts. Although not their major trading partner, Europe has for many years provided these economies with significant support through preferential market access arrangements for key commodity exports.

Challenges to the WTO compatibility of these arrangements by non-ACP developing countries have hastened their erosion. As a result it was agreed that an alternatively advantageous WTO compatible arrangement would be negotiated between CARIFORUM and Europe.

CARIFORUM therefore concluded a WTO compatible agreement that preserved the preferential treatment of their export goods, slowing the erosion, and opened up access in areas suited to their new structures as service economies.

In negotiating this agreement CARIFORUM also recognized that, as small economies, they suffer the disadvantage of diseconomies of scale in the global market. They therefore negotiated the inclusion of provisions that will assist in the development of innovation systems, anticipating the contribution of such systems to the differentiation of its export product allowing them to move away from commodity dependence.

In doing so CARIFORUM and the EC determined an appropriate balance between level of development and the level of protection provided for intellectual property rights. CARIFORUM also determined, based on national and sub-regional development plans, a number of priority areas for the development of such innovation systems.

In developing its arguments for support of its position CARIFORUM paid close attention to the EU's own efforts to support innovation, particularly for its small and medium enterprises. It argued successfully for the opening of such present and future support programmes to CARIFORUM applicants.

Two principle lessons were learnt that might be of value to other ACP regions as they consider what elements they might wish to add to the current interim agreements on goods. The first of these is the value of collaboration, both regional and extra-regional and across subject areas. Second is the need to find the right synergies between the innovation objectives of the region and those of the EU.

The recommendation for CEMAC to consider are therefore:

- Re-establish close collaboration amongst the negotiators within CEMAC;
- Focus on creating an environment for the development of national innovation systems while determining the synergies that might allow the establishment of regional innovation systems amongst CEMAC states;
- Determine the level of intellectual property protection appropriate for each focus area identified for the relevant innovations systems and link this to the level of development of such systems;

- Incorporate collaboration with relevant multilateral organizations like the World Customs Organisation as a precursor to undertaking commitments for greater enforcement of intellectual property rights;
- Cherry pick from the CARIFORUM – EU EPA and use it as a platform or foundation rather than as a template; and
- Look for areas of collaboration in innovation that could take advantage of the interests and advantages of both CEMAC and the EU.

## 2. Introduction

For the purposes of the negotiation of the new trading arrangements of the Cotonou Agreement the Caribbean Forum (CARIFORUM) of African, Caribbean and Pacific (ACP) States comprises of 15 small States<sup>1</sup> which are highly open to external trade, extremely vulnerable to changes in the external environment, whose economies are significantly skewed towards services, have high external debts, and whose major trading partner is the United States.

For many of these states, key commodity exports, including sugar, bananas, rice and rum, have been long dependent on the trading arrangements with Europe and attendant preferential treatment in the European market. Objections to these unilaterally granted, non-reciprocal preferential trading arrangements for goods, particularly by non-ACP Developing Countries, have been eroding these preferential margins.

The European Commission (EC), on behalf of the European Union (EU), and the ACP States agreed that the EC would negotiate with Members of the World Trade Organisation (WTO) for the consensus needed to grant these preferential arrangements a waiver of WTO obligations that would allow them to continue until the end of December 2007. They further agreed that new WTO compatible trading arrangements for goods would be negotiated between them by then.

Of the 15 CARIFORUM States, only one, Haiti, is classified as a Least Developed Country (LDC) and therefore would have access, in the absence of a negotiated WTO compatible trading arrangement, to the EU market for its goods under the European's unilateral Everything But Arms (EBA) scheme. The goods from all the other states would have to be traded under the European standard General System of Preferences (GSP) in competition with all qualifying Developing Countries and often facing higher tariffs, or at the same tariff rate as any other state, Developing or Developed.

The economic effect and social dislocation of this circumstance would have been significant for these small vulnerable economies. It was estimated that under the standard GSP, 26 of 54 major CARIFORUM exports to the EU would be affected, over 70% of the \$1.4 billion US dollar value of this trade<sup>2</sup>, and that CARIFORUM could be required to pay as much as \$300 million US dollars per year in additional tariffs.

CARIFORUM therefore concluded that a WTO compatible trading arrangement for goods was necessary to protect, and decelerate the erosion of the trading advantage for its goods in the EU market. CARIFORUM also recognized that, as service economies, an agreement addressing only trade in goods, while offering some potential for growth, would not provide better opportunities for this key economic sector. In addition Haiti recognized that the security of a well negotiated trading arrangement could improve on the uncertainty of the unilaterally determined EBA arrangement.

In addition, CARIFORUM recognized the challenges it faced in trying to compete with low-cost producers, particularly those larger producers that can take advantage of economies of scale. In order to develop competitive advantages by differentiating its products CARIFORUM needs to improve its level of innovation. The EPA negotiations provided an opportunity for CARIFORUM to encourage partnerships with Europe that could give momentum to the development of national and regional innovation systems.

### **3. The Preparatory Process**

At the Ministerial level it was agreed that the negotiations would build on the Cotonou provisions and that nothing would be *a priori* excluded from the negotiations.

With a negotiating structure already in place, having been used for both the WTO and the Free Trade Area of the Americas (FTAA) negotiations, preparations began by seeking to determine CARIFORUM negotiating guidelines. As part of this process close attention was paid to the development of the EC's negotiating mandate.

CARIFORUM already recognized that the level of protection it provided in the area of intellectual property rights under its WTO Trade Related Intellectual Property Rights Agreement (TRIPS) obligations was being significantly underutilized because of its level of development. CARIFORUM therefore saw little advantage in negotiating an increase in this level of protection.

At the same time CARIFORUM had some possible interest in developing three areas with the EU: the protection of biological diversity and traditional knowledge; the development of its geographical indications and the strengthening of their protection; and the development of its creative industries, particularly in the digital environment that evolved after the TRIPS Agreement was concluded.

It must be noted that the CARIFORUM interests in GIs and the creative industries are also a reflection of the need to diversify production structures and improve the returns from the relevant value chains. These two factors were also considered in the development of the CARIFORUM negotiations guidelines for market access in both goods and services.

CARIFORUM also recognized that the EU had two well-known interests in the area of intellectual property: an increase in the enforcement of existing intellectual property rights; and stronger protection for its geographical indications.

The CARIFORUM guidelines informed the CARIFORUM participation in the development of the ACP guidelines for the negotiations and these in turn then informed the CARIFORUM negotiating positions and strategies.

### **4. Negotiating Innovation with the EU**

#### **4.1 Introducing the concept**

From the onset of the negotiations CARIFORUM indicated the need to ensure an appropriate balance between the level of protection granted to intellectual property rights and the level of development of CARIFORUM economies, particularly the level of innovation. Using the EC's internal articulation in its Lisbon Agenda of the importance of innovation, particularly of small and medium enterprises, for competitiveness and economic development, CARIFORUM led a discussion on the development of its innovation systems, including a regional innovation system.

Innovation is ultimately the result of social interactions between diverse economic actors taking place in an environment open to new ideas. But much of the work on innovation reveals many

unknowns in constructing an appropriate framework for innovation to take place. Learning is a key process for innovation, but investment in education is complex and has long term returns. The transfer of technology from research organizations to commercialization organizations, or from one firm to another, cannot be regulated to happen; it can however be discouraged if there is no mutual gain.

In formulating its arguments for the promotion of innovation and the development of innovation systems CARIFORUM was cognizant of the work also taking place regionally and internationally. At the regional level this included, for example, approaches being nascently articulated: for the implementation of the CARICOM Single Market and Economy (CSME)<sup>3</sup>; by the Competitiveness Council of the Dominican Republic; by Universities across the region; by competitiveness programmes being implemented at the national level; and the programmes being developed by the Caribbean Export Development Agency. Internationally this included the work of: the World Bank; the Inter-American Development Bank and others<sup>4</sup>.

Noting the support programs and activities provided by the EC and its member states for the establishment of such systems and other means of supporting innovation by small firms, CARIFORUM understandably met initial resistance to its proposals for access to these programs. At CARIFORUM's request, representatives of other Commission Directorates with more specific responsibility for innovation were made available to the negotiators.

Ultimately, arguing that the geographic proximity of CARIFORUM to overseas departments of the EU warranted similar flexibility by the EC as expressed in its Neighbourhood Policy on continental Europe, CARIFORUM persuaded the EC to agree that where the rules allowed, such access could be considered. It was also agreed that some of this flexibility would take into account the possibility of partnerships arrangements with the neighbouring overseas departments.

The obvious *quid pro quo* for this apparent concession was the consideration by CARIFORUM of what obligations it would be willing to undertake with respect to intellectual property rights. In line with the overall importance of regional integration in the EC's mandate this included consideration of where regional, as opposed to national, obligations could be undertaken. It should be noted at this point that, although the Treaty establishing the CSME requires the consideration of a regional administration for intellectual property rights (except copyright), the CARICOM-DR trade agreement has intellectual property as a component of its as yet unfinished built-in agenda.

#### **4.2 Elaborating the concept**

At the EC's request CARIFORUM developed a short concept note on the relationship between trade and innovation and how it might be expressed in the EPA. The first note proposed that the relevant EPA Chapter outline the relationship between a given area of economic activity, the support that CARIFORUM would require to increase its level of innovation in such area and the intellectual property rights that might be considered for appropriate strengthening in tandem with the development of the appropriate innovation system. This, CARIFORUM argued, would allow for a determination of whether the appropriate balance between each of the elements had been achieved. It was also proposed by CARIFORUM that measures of innovation should be developed and any increase in intellectual property protection should follow measured increases in innovation.

Although the literature reflected an assumption that innovation systems were limited to the fields of science and technology, CARIFORUM saw its immediate strengths in the creative industries as being the natural priority for the development of an innovation system. CARIFORUM also noted that, for example, the work of Cooke on Regional Innovation Systems<sup>5</sup> suggested that a region of sovereign states might overcome some of the key challenges to the development of the sub-national regional innovation systems often described.

The EC held the persuasive view that any area of economic activity should have at its disposal any intellectual property right without them being in principle mutually exclusive. As such, they proposed, in the context of the EPA as a trade agreement, that the intellectual property right obligations should be grouped in a stand alone section within the Chapter, allowing for the clarity expected from such an agreement. They also expressed the view that even within the EU the best approach to nurturing innovation was not clear. As such it would be unwise to craft legal language that would bind actions that had not been established as best practice.

CARIFORUM developed a second concept paper, expanding on its first, which identified a number of areas of possible interest for the development of innovation systems within CARIFORUM. One purpose of this was to test the two approaches to the structure of the text in the negotiations. As a result of this discussion and a number of other factors related to the status of the negotiations in other areas of the EPA, CARIFORUM saw no damage done if in the negotiated text the structure proposed by the EC was used, since CARIFORUM was now in a position to consider which rights might need strengthening in areas considered to be of developmental priority.

At this stage the EC proposed two sub-sections for a section on intellectual property rights in the Chapter: one containing possible obligations related to protection for specific rights and the other containing obligations related to the enforcement of intellectual property rights. The enforcement section they proposed appeared to be based on their Enforcement Directive. The obligations to be contained in the other sub-section were developed by different technical staff of the Commission and so were introduced over several negotiating sessions. It was also mutually agreed that a section on Principles and one on Cooperation would be included.

In the context of protection of specific rights CARIFORUM took note of recent work concerning the possible but limited effect these might have on the trade flows<sup>6</sup> of CARIFORUM economies given their size, level of development and production structure.

As anticipated, the text that was presented last by the EC in the negotiations was the text concerning the protection of geographical indications. These negotiations proved to be quite intense, with the technicians on both sides labouring to find the appropriate approach bearing in mind the obvious imbalance in the use of this tool between the EC and CARIFORUM member states. The EC indicated a limited range of GIs that were its priority interest and CARIFORUM responded with its own list of possible GIs that it was seeking to have protected.

## 5. The Negotiated Results

### 5.1 The Context

Rather than title the Chapter<sup>7</sup> ‘Trade and Innovation’ as had been proposed initially by CARIFORUM, it had been agreed to use the title ‘Innovation and Intellectual Property’ to reflect

what was to be the agreed final structure. Nevertheless CARIFORUM believes that it has taken a small but important step in changing the paradigm within which the subject of intellectual property is dealt in trade negotiations.

The Chapter opens with important declaratory statements that set the context for the Chapter. They place innovation and creativity before the consideration of intellectual property rights and they establish the relationship between the protection of intellectual property rights and levels of development.

### **5.2 The Objectives**

The objectives of the Chapter have been equally carefully crafted. It highlights the role of innovation in the competitiveness of not only small and medium enterprises, but also micro-enterprises. This is important as it reflects the difference between the definition of small European enterprises and small enterprises in the context of CARIFORUM.

The objectives also reflect a balance between the science and technology innovation system and that of the creative industries. This reflection was difficult to achieve, as for many a reference to creative industries includes activities in the very sensitive cultural sector. As noted earlier, these issues were also addressed in the negotiation of services market access. This resulted in a specific cultural protocol that should allay any fears that arise as to the intent of this objective.

The final objective contains an important reference to the neighbourhood situation between the European Community through its outermost regions CARIFORUM. This opens a number of opportunities for the negotiation of a successor agreement to the Cotonou Agreement.

### **5.3 Innovation**

The first section of the Chapter addresses the obligations concerning the facilitation and promotion of innovation. It contains three related elements. The first addresses regional activities; the second access to support; and the third contains several articles identifying priorities for cooperation.

With respect to regional activities, the language maintains the necessary balance between regulatory and policy frameworks, and must be understood in the context of the relationship between these frameworks and levels of development.

With respect to access to support activities there are a number of important components. First is the broad identification of programmes and activities within which CARIFORUM participation is to be facilitated and promoted. This binding obligation is tempered somewhat by the respect for rules that might constrain participation. The second paragraph of the relevant article therefore creates the opportunity for this difficulty to be aired and either the rules amended or rules for new programmes and activities written so as to avoid such constraints.

As with each of the Chapters in the EPA, the areas of priority for cooperation are identified. The EPA must be recognized as an integral part of the Cotonou Agreement in which, rather than specifying details of programmes and activities in the agreement, a mechanism is elaborated that allows the beneficiary states to determine and programme their own needs. While this mechanism has been widely criticized for its undeniable bureaucracy, it has provided a vehicle for the successful negotiation of programme support for more than one important CARIFORUM

industry.

The first area addressed refers to cooperation to improve competitiveness and innovation. In this context, the promotion of creativity and design, particularly by micro, small and medium enterprises is important for CARIFORUM. This includes the networking of design centres in both the EC and CARIFORUM. Exchanges and linkages between economic operators are also to be promoted including activities to promote technology transfer.

The role of science and technology is recognized next. Again the use of networks and exchange of personnel is to be promoted to allow for more effective participation of CARIFORUM researchers in the EU research programmes. The involvement of micro, small and medium enterprises is also to be promoted, linking this area to the one described previously. Also included is CARIFORUM participation in the Knowledge and Innovation Communities of the European Institute of Innovation and Technology.

It was recognized that to make the kind of participation, collaboration and exchange of information more effective greater efforts would need to be made in the areas of information and communication technologies. Particularly important to realize the objectives of the chapter is the attention to be paid to standards and interoperability issues. It should also be noted that cooperation in the development of non-commercial content is also included.

The final areas identified as a cooperation priorities are eco-innovation and renewable energy. In addition to identifying similar approaches of networking, partnerships and exchanges this area identifies project areas that are to be facilitated.

In anticipation of changing priorities over time, Part I of the agreement contains an obligation for ongoing review and revision of the EPA. Part 1 of the agreement also places the priority activities articulated in this Chapter into the overall context of the development of CARIFORUM innovation systems.

#### **5.4 Intellectual Property**

The section on intellectual property begins by outlining the **principles** that will apply to the section. It provides transition periods for implementation but allows for these to be adjusted. Important within these principles are references to the development needs of CARIFORUM states, their levels of development and specifically their development priorities. Particular care is taken to ensure that the EPA does not impair a state's capacity to promote access to medicines, protect public health and nutrition.

The principles include the way in which technology transfer between CARIFORUM and the EU can be facilitated. It builds on the EC's TRIPS obligation<sup>8</sup> to provide incentives for the transfer of technology to Least Developed Countries, requiring them to facilitate and promote the use of these incentives by their firms. Many of the incentives provided by the EU in compliance with this obligation are not specific to LDCs and so already extend to CARIFORUM also. However these measures used as incentives to technology transfer have not been as effective as anticipated by some. CARIFORUM and the EU have therefore agreed to promote the use of these measures and discuss their performance with the objective of reviewing them if they are not effective or in accordance with best practice.

The section next addresses the **standards** concerning intellectual property rights. It reflects principally an agreement to try to update these standards in line with agreements reached at the World Intellectual Property Organisation (WIPO) over the last 12 years since the conclusion of the TRIPS Agreement, particularly those relating to the new digital environment that has arisen during this period.

In this context CARIFORUM states had already been considering accession to the WIPO copyright treaties to protect its creative sector from internet piracy. With recognition of the care necessary for the implementation of the treatment of technological measures for the protection of copyright in a way that does not restrict fair use and interoperability, and the diminishing use of the initial measures that raised concerns, CARIFORUM and the EU agreed to comply with these treaties.

In addition to strengthening the protection provided for GIs of products other than wines and spirits, it establishes a mechanism through which potential CARIFORUM GIs can be developed. This is intended to take place in the main before the end of the transition period. This additional protection is expected to transfer a larger part of the relevant value chain to the producers and strengthen many rural economies within CARIFORUM.

The asymmetrical patent obligations contain a specific declaration recognizing the importance of the implementation of the amendment of the TRIPS Agreement agreed to in December 2005 that provides states with little or no manufacturing capacity for pharmaceutical products the opportunity to make effective use of the TRIPS provisions on compulsory licensing.

An article on the protection of genetic resources, traditional knowledge and folklore was considered useful in the context of CARIFORUM interest in eco-innovation. Although the article opens the door for the use of a declaration of source requirement for a patent applicant, it recognizes the intense activities taking place multilaterally and provides for a review of the article to make any amendments that the conclusion of these consultations require. In the interim it ensures that the Convention on Biological Diversity and the patent provisions are implemented in a mutually supportive way.

The need to address information asymmetries that might arise between small and large firms was also a critical CARIFORUM objective. Small firms easily find themselves negotiating licensing agreements for patented technology that, while protected at the time in the right-holders jurisdiction, might be due to enter the universal public domain imminently or may never have been protected in the jurisdiction of the potential licensee. In addition many license agreements require any innovations made by the licensee be the property of the original right-holder. It was therefore agreed that the EC and CARIFORUM would address such potential disincentives to this means of technology transfer and innovation.

Each of the obligations addressed bears a relationship to elements in the section on innovation. Industrial design protection is related to the references to the establishment and networking of design centres. Protection of genetic resources, including plant varieties, should help to incentivize eco-innovation. Introducing the WIPO copyright treaties helps to protect the small entertainer and is tied to the services market access gain for the temporary movement of entertainers.

The experience within CARIFORUM has been that the administration of intellectual property need not carry with it the cost burden that many anticipate. With the appropriate adjustment of user fees, and even at the fairly low levels of use in small economies, these fees can finance the establishment and development of these administrative units. CARIFORUM is nonetheless still looking carefully at models of regional administration like the African Intellectual Property Organisation (OAPI) and has committed to taking advantage of such regional arrangements in accordance with its development priorities.

### **5.5 Enforcement**

The penultimate part of the section addresses the most challenging aspect of the negotiations, the text on the enforcement of intellectual property rights. Many of the measures were expressed in language that has evolved in European jurisprudence and required careful explanation to CARIFORUM. In many cases, with minor adjustments, the measures accord with current CARIFORUM legal practice. One concern that needed careful attention was not to tie the hands of the CARIFORUM judicial officials, particularly in common law jurisdictions.

The most significant concern arose from the proposals to secure evidence for prosecuting infringement cases. One such proposal in particular, extending the application of border measures to all intellectual property infringements and to such infringing products being exported, was contentious almost to the end. It was finally agreed that such a measure could extend in the first instance to those rights for which a customs officer might reasonably be able to determine the validity of a claim of possible infringement, geographical indications and designs. It was also agreed to collaborate to eventually expand the scope of this approach to goods infringing all intellectual property rights.

### **5.6 Cooperation**

The final section of the Chapter addresses the cooperation required to extract the maximum benefits from the provisions on standards. The language of these priority areas was carefully negotiated to establish a relationship between the obligations undertaken in the section on standards and the provision of appropriate cooperation. This is clearest in the case of GIs, where the obligation itself contains a cross-reference back to the development of CARIFORUM GIs as a cooperation priority.

## **6. Lessons Learnt**

CARIFORUM was in a position to take advantage of the limited time for the negotiations as it already had in place an operational external trade negotiating structure, the Caribbean Regional Negotiating Machinery (CRNM) that had been used for previous multilateral and plurilateral negotiations. This operational structure also had a training component. CARIFORUM's previous experience was also reflected in the quick understanding of the technical issues by many officials in CARIFORUM member states, some of whom had trained with the CRNM.

As a result of this collaboration in previous external trade negotiations many of the trade officials from different member states had developed an understanding of each other's positions. The fairly deep integration of CARICOM, and within it the Organisation of Eastern Caribbean States (OECS), and the prior negotiations between CARICOM and the Dominican Republic combined with this previous experience contributed to the success of the intensive internal consultation process that was undertaken.

This previous trade negotiating experience also taught the value of the cross-fertilisation of ideas across negotiating disciplines. As such gains made in some areas were transferred to others. The intensity of the negotiating process, however, afforded too few opportunities for this to be taken greater advantage of. Equally, too few opportunities were taken to communicate and collaborate at the technical level with negotiators in the other ACP regions. While the regular post-facto political level interactions were helpful for clarifying positions, the generation of coherent strategies and approaches could have been enhanced by greater interaction of this nature.

In the specific area of innovation the challenge facing the negotiators was that innovation itself cannot be determined or commanded by rules. The objective therefore had to be, and was, to try to agree on approaches that would create the environment conducive to innovation. An important element of this environment had to be a legal framework that would help protect small entities from being taken advantage of by those with greater resources.

Enabling access to information through networks and partnerships needed to be addressed not only in the innovation section but also in the services negotiations allowing for the easier movement of people. Improving standards and metrology and access to equipment was also important. The EC offer of duty free quota free eliminated the need to address tariff escalation that could dampen innovation.

## **7. Recommendations**

In the limited time available for the preparation of this paper it has not been possible to get a sufficiently clear view of the specific challenges and opportunities facing the Central African Common Market (CEMAC) region. The following recommendations are therefore fairly general in nature.

The immediate challenge for the CEMAC region is how to re-engage actively and fully with the Commission on non-goods issues now that the waiver has already expired. Compounding this difficulty is the need to re-establish common positions within the region on the possible negotiating topics. Perhaps the EC's key interest at this stage will be to repair the damage to the regional integration process that the EPA negotiations have either caused or exacerbated. The first recommendation is therefore to demonstrate a genuine interest in strengthening regional integration.

The second recommendation is to include in the plan and schedule of the negotiations meetings between the technical level negotiators to exchange views and experiences on their respective subjects, both at the regional level and with appropriate technicians from appropriate Directorate Generals of the Commission. Allied with this is the recommendation that the negotiators meet regularly as a regional group to ensure cohesion in the various areas and to take advantage in each area of the gains made in any area, or conversely to develop strategies to counter losses conceded in any area.

With respect to innovation it may be easier to conceive regional innovation systems in the way it is addressed in the literature<sup>9</sup>, at the sub-national level. It is therefore recommended that CEMAC focus the innovation negotiating priorities on national priorities, surrounding a core of regional interests. It may be possible to claim precedent from the way in which goods and services are negotiated with schedules for each state in the region.

In addition, concerning the possible regional priority areas for development cooperation, CEMAC's biological forestry reserves provide it with a comparative advantage that should be converted to a sustainable competitive advantage. This might be done through developing regional plant breeding programmes. In addition CEMAC might consider establishing a joint committee with the EC to develop and monitor the exploitation of its biological diversity.

With respect to standards of protection it is recommended that CEMAC consider proposing that these be included as built-in agenda items only and that the EC acknowledge that the existing obligations concerning levels of protection supersede the current requirements for economic development. Given the plant breeding recommendation above CEMAC might consider revitalizing efforts to join the Union for the Protection of New Plant Varieties (UPOV).

With respect to the enforcement of protection for intellectual property rights it is recommended that CEMAC negotiate for any such obligation to be dependent on the evidence of capacity to manage the activities required by the obligation. As such collaboration under the World Customs Organisation (WCO) might be an important option to include in the negotiations. The WCO has already developed guidelines for the implementation of the border measures required by TRIPS.

And finally, the CARIFORUM-EU EPA must not be seen as a template for an EPA in other ACP regions. It has been carefully crafted to suit our particular circumstances as was intended by having regional negotiations rather than ACP-wide negotiations. Other ACP regions should however identify any provisions that CARIFORUM has managed to achieve that can be to their advantage and use these as a platform to negotiate improved provisions.

The key to achieving the appropriate arrangements to stimulate innovation must be to identify the ways in which the diversity within each region can add to the innovation potential of the other.

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<sup>1</sup> Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, the Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago.

<sup>2</sup> Based on 2004 figures

<sup>3</sup> See the various relevant work of Nurse and Girvan

<sup>4</sup> See the various relevant work of Barton, Blostrom, De Ferranti, Cooke, Maloney and Melo

<sup>5</sup> See in particular Cooke (2003): *Strategies for Regional Innovation Systems: Learning Transfer and Applications*, UNIDO Policy Paper

<sup>6</sup> See the various relevant work of Blyde and Branstetter

<sup>7</sup> Part II, Title IV, Chapter 2 of the CARIFORUM-EC EPA

<sup>8</sup> Article 66.2 of the WTO TRIPS Agreement

<sup>9</sup> Similar recommendations are made in the report from the Knowledge for Africa's Development Conference held in South Africa in May 2006 and the follow up seminar held in September 2006. Other useful publications can be found on the World Bank's Knowledge for Development (K4D) website, particularly the Africa and the Knowledge Economy page.