



TRADE RELATED TECHNICAL ASSISTANCE (TRTA II)  
PROGRAMME

# Implementation Monitoring Guide

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**22 November 2010**  
**Islamabad, Pakistan**



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# List of Abbreviation

CE	Conformity European
CMO	Collective Management Organization
EC	European Commission
EU	European Union
GI	Geographical Indications
GoP	Government of Pakistan
HACCP	Hazard Analysis Critical Control Point
ICT	Information and Communication Technologies
IAF	International Accreditation Forum
IBA	Institute of Business Administration
ILAC	International Laboratory Accreditation Cooperation
IP	Intellectual Property
IPAS	Industrial Property Automation System
IPO	Intellectual Property Organization of Pakistan
IPPC	International Plant Protection Convention
IPR	Intellectual Property Rights
ISO	International Organization for Standardization
ITC	International Trade Centre
LUMS	Lahore University of Management Sciences
MinFA	Ministry of Food and Agriculture
MoC	Ministry of Commerce
MoIP	Ministry of Industries and Production
MoLDD	Ministry of Livestock and Dairy Development
MoST	Ministry of Science and Technology
MRA	Mutual Recognition Agreement
NAPHIS	National Animal and Plant Health Inspection Service
NEP	National Enquiry Point
NPO	National Productivity Organization

NPSL	National Pakistan Standard Laboratories
PBR	Plant Breeders Rights
PCSIR	Pakistan Council for Scientific and Industrial Research
PCT	Patent Cooperation Treaty
PHDEC	Pakistan Horticulture Development & Export Company
PIFFA	Pakistan International Freight Forwarders Association
PITAD	Pakistan Institute of Trade & Development
PMO	Programme Management Office
PNAC	Pakistan National Accreditation Council
PSC	Programme Steering Committee
PSQCA	Pakistan Standards and Quality Control Authority
R&D	Research and Development
RASFF	Rapid Alert System for Food and Feed
SMEDA	Small and Medium Enterprise Development Authority
SPS	Sanitary and Phytosanitary
TBT	Technical Barriers to Trade
TDAP	Trade Development Authority of Pakistan
TEVTA	Technical Education & Vocational Training Authority
ToR	Terms of Reference
TRIPS	Trade Related Aspects of Intellectual Property Rights
TRTA	Trade Related Technical Assistance Programme
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

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# 1 INTRODUCTION

## 1.1 THIS REPORT

The monitoring framework recommendations in this report build on the work already done by Spencer Henson (UNIDO's International Expert on Monitoring and Evaluation) and the Trade Related Technical Assistance (TRTA II) Programme inception phase report developed by the UNIDO Programme Management Office (PMO), Islamabad, Pakistan.

By default most of the development projects of the nature of TRTA II limit themselves to the monitoring of the activities and of the outputs/products produced as a result of such activities. This limited approach is normally adopted as 'managers' of such programmes only monitor what is in their direct control. By taking appropriate measure they feel comfortable that they will be able to deliver the programme outputs. However, in most cases, the objectives and the purposes of interventions are not bounded by the delivery of outputs. Benefits can accrue directly or indirectly as a result of conducting activities and producing programme outputs. These impacts depend on several complex factors mostly outside the control of programme managers.

So, from a control point it only makes sense to monitor what is in the direct control of the programme, however, the function of monitoring is not only to report on deliverables but also to help the programme focus on its impacts. Therefore, complete monitoring and evaluation goes much beyond the activities and outputs, and has as its key objective, the measurement/realization of impacts generated by programme interventions among the beneficiary groups.

In light of the argument presented above, whereas, in this report we only propose an '**implementation monitoring**' scheme, the '**impact monitoring**' scheme is also being developed and will be presented as a sequel to this report. Figure 1-1 below further elaborates the point being made in the above paragraph by showing that both implementation and impact monitoring are parts of the complete '**impact chain**'.<sup>1</sup> This split approach has been taken to suit the client requirement. This report (part 1) has been prepared for Ministry of Commerce, Government of Pakistan to assist them in overseeing efficient implementation of the TRTA II programme activities (Activities and the Outputs part of the impact chain). The framework for impact monitoring will be developed for UNIDO in light

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<sup>1</sup> An impact chain consists of activities, products/outputs, good use of the outputs, direct effects and indirect effects. The activities and outputs is what get monitored for implementation and the remaining three attributes relate to the impact monitoring.



of their objective to measure attributed contribution of interventions towards the overall objective of the TRTA II programme.

## 1.2 BACKGROUND

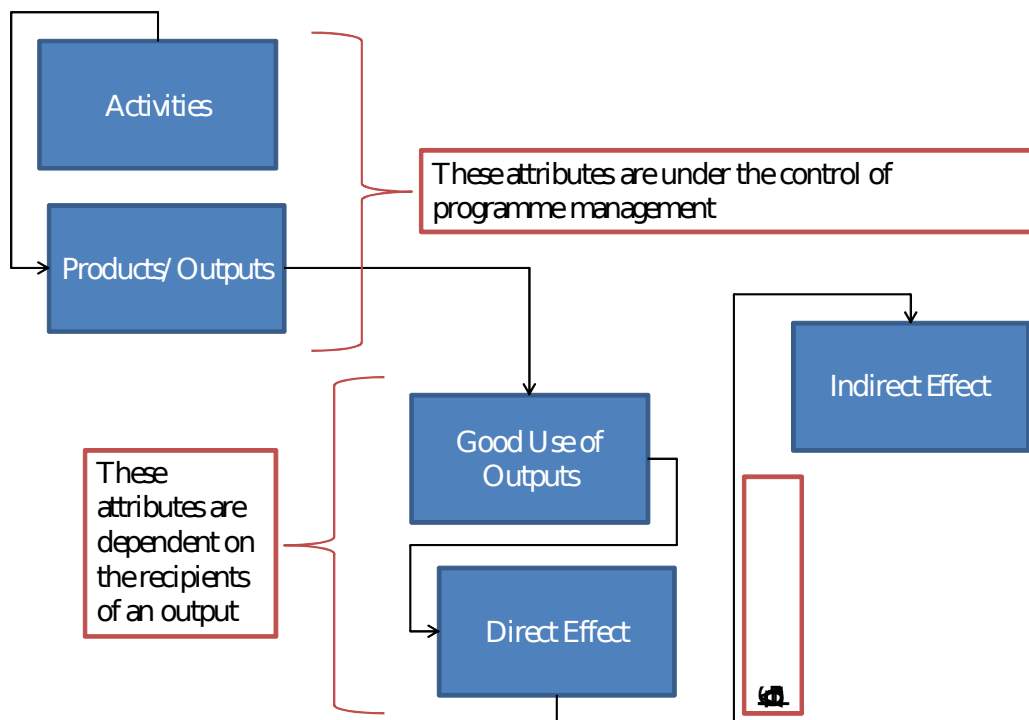
The TRTA II programme is a project funded by the European Union (EU) which aims at strengthening the capacity of Pakistan to participate in trade. The programme started its inception phase in January 2010 and is expected to complete its envisaged activities over year ending in December 2014. The overarching objective of the programme is to contribute towards poverty reduction and sustainable development in Pakistan. At a more specific level, the purpose is to support economic integration of Pakistan into the global and regional value chains at favorable access points. It is also expected that the programme will be able to stimulate productive job creation via enhancement in overall trade profile of Pakistan.

The TRTA II programme includes three distinct yet closely linked components. The components are:

1. Trade policy capacity building;
2. Export development through improvement of quality infrastructure;
3. Strengthening of the intellectual property rights system.

The first and the third components focus mainly on capacity building of government apparatus, whilst, the second component has a multi-dimensional focus including activities involving and benefitting directly the private sector stakeholders.

### **FIGURE 1-1: Components of an Impact Chain**



Source: Based on the concept developed in [GTZ (2007)]

### 1.3 MONITORING SYSTEM

A monitoring system is simply a systematic procedure used to verify the effectiveness and the efficiency of the implementation of a programme/project. It should also enable the user to identify achievements and weaknesses so that corrective measures may be taken to get the desired results [GTZ (2007)]. Effectiveness implies delivery of all agreed outputs in time and efficiency implies that the delivery of the results was achieved at lowest possible costs. Monitoring of programme will normally require continuous data collection as a routine part of the programme/project. The data collection should compare actual results against the planned results and then highlight the deviations that require corrections. A good monitoring system must adjust to the requirements of the information needs of the project and hence, even with a significant amount of literature available no standard design of a monitoring system exists. However, there are some **'best practice'** principles that must apply to all monitoring systems.

GTZ in their report Impact Monitoring Guide (2006-07), state that there are six key features in an effective and an efficient monitoring system. A modified version is presented below to suit relevance for this report.

#### 1.3.1 USEFULNESS

The monitoring scheme must be designed in such a way that it adds value to the overall effectiveness of the programme. The monitoring should

result in a measurable benefit such as timely delivery of outputs, avoidance of wastage of resources or quality assurance.

#### 1.3.2 CREDIBILITY

The monitoring system must allow for reliable data collection at clearly and predefined schedules. The methods of data collection must be simple, reliable and efficient and should also ensure that information measured in line with what is being monitored.

#### 1.3.3 EFFICIENCY

The system should effectively balance the tradeoff between cost and reliability of data. Monitoring is not about designing complex systems to micromanage activities, instead it should allow for the generation of sufficient information to provide reasonable feedback to the entity responsible for monitoring and making judgments about success of the project.

#### 1.3.4 PARTICIPATION

As a monitoring system will normally involve more than one 'actors', it is best that the design incorporates the feedback of all these individual actors. This will ensure general participation and understanding of the system and will facilitate swift provision of information and also better use of it.

#### 1.3.5 IMPARTIALITY

The information gathered must not suffer from any bias due to the prevalence of a pre-determined perspective and the exclusion of others. The approach of monitoring to reach conclusions and recommendations must be neutral and transparent.

In addition to the above traits one additional property of a good monitoring system is that it should be '**custom designed**' to suit local context. Whereas, international best practices provide the overall logic the monitoring system should be developed by incorporating the changes required by the local environment. Hence, adaptability and specificity of the monitoring system is the key for successful implementation.

### 1.4 USE OF THE REPORT

This report is written to assist Ministry of Commerce and UNIDO who already have considerable competence in managing and monitoring implementation of trade related programmes. They will have knowledge, skill and experience to understand and apply the framework developed in this report.

### 1.5 STRUCTURE OF THE REPORT

After this introductory chapter the rest of the guide is set out as follows:

- Chapter 2 – Methodology and Proposed Framework
- Chapter 3 – Monitoring Framework for Component 1 of TRTA II
- Chapter 4 – Monitoring Framework for Component 2 of TRTA II
- Chapter 5 – Monitoring Framework for Component 3 of TRTA II
- Chapter 6 – Conclusion

## METHODOLOGY & PROPOSED MONITORING FRAMEWORK

### 1.6 INTRODUCTION

In developing a proposed model for implementation monitoring we have considered several existing frameworks that are progressively being used by donors, governments and other multilateral/bilateral development agencies. The focus has been to create a hybrid framework which suits the local context of Pakistan and addresses the challenges faced locally. Success of any monitoring system will depend on the ease and consistent reliability of monitoring data. Unfortunately, data availability and reliability has always been a weak area for Pakistan. Both public sector organizations and private sector lacks the capacity and interest to manage data in useful form. This lack of good quality, consistent panel data is a prime reason for inadequate evidence based policy making. We have tried to keep the 'implementation monitoring' system less adventurous yet comprehensive such that it suffices the requirements of client.

### 1.7 EXISTING MODELS FOR MONITORING & EVALUATION

In preparing the recommendations for this report we have considered four existing models for monitoring and evaluation. The analysis of these models suggests extreme similarity in approach of monitoring and evaluation done at the programme level. Below we have presented a brief overview of all the models considered.

#### 1.7.1 GTZ MODEL

The GTZ model breaks down the whole monitoring and evaluation chain into three parts (See Figure 2-1). The first part consists of activities and outputs of the programme. For example, an activity may be to appoint an international training expert on benchmarking to train fine NPO officers. The output as a result of this activity will be that five officers have been trained by the expert. The overall progress can be verified by way of training certificates given to officers or a before and after situation. One can also monitor that this progress was made in the pre-agreed time and within budget. This portion is normally referred to as 'monitoring implementation' and is in the managements' control.

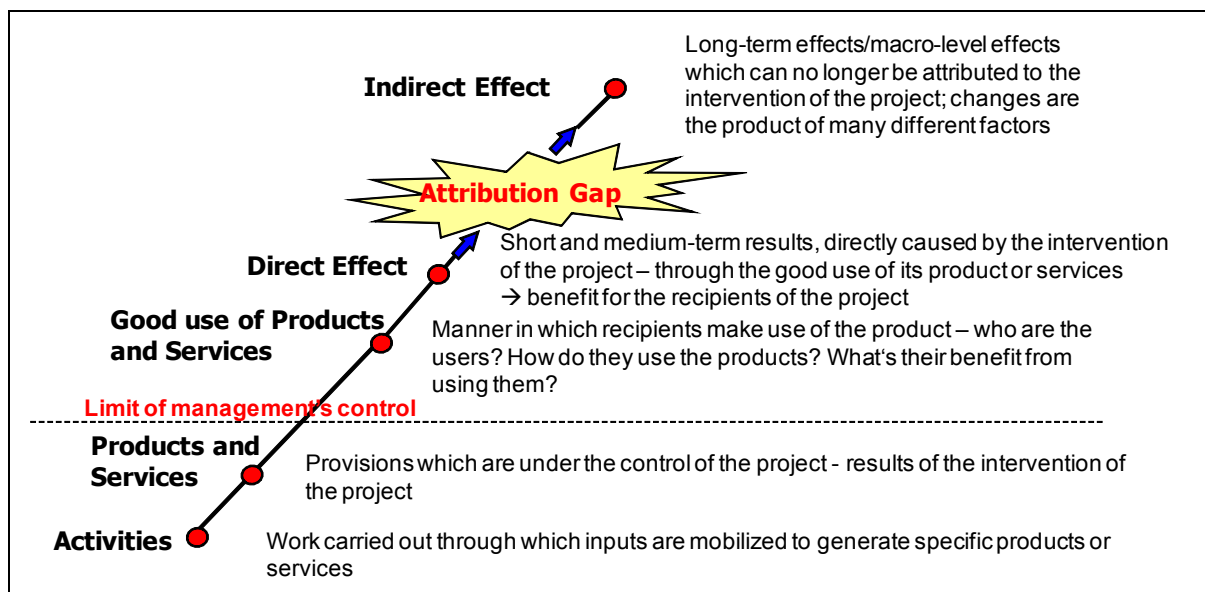
However, the next step in GTZ chain is to assess that the officers that have been trained are performing/contributing to NPO using their new acquired skills. In other words we need to answer as to how well the output is being used by the beneficiary. This use is closely linked to the direct benefit of the intervention mostly accruing to the beneficiary. If we

take the above example further then good use of the output will imply that the trained officers start to perform better activities (research, benchmarking etc.). The direct benefit of this could be that the NPO begins to receive a larger funding from the government due to improved performance.

The final step of the impact chain is to assess the overall macro level impact. Here the GTZ model talks about the ‘attribution gap’ i.e. that after this point it is not possible to measure the attributed impact of the programme intervention as so many other factors are contributing. Using the same example above the indirect effect could be enhanced export and reduction in poverty levels. The factorial weight of the programme contribution will be much smaller as compared to the direct effect.

The direct and the indirect effect define the contribution of the project to the development of the overall economy/society. Therefore, they constitute the most important monitoring level based on results. Although direct and indirect effects are no longer under total control of the project, it must configure its activities, products and/or services in such a way that the desired effects are maximized.

**FIGURE 2-2: GTZ IMPACT CHAIN**



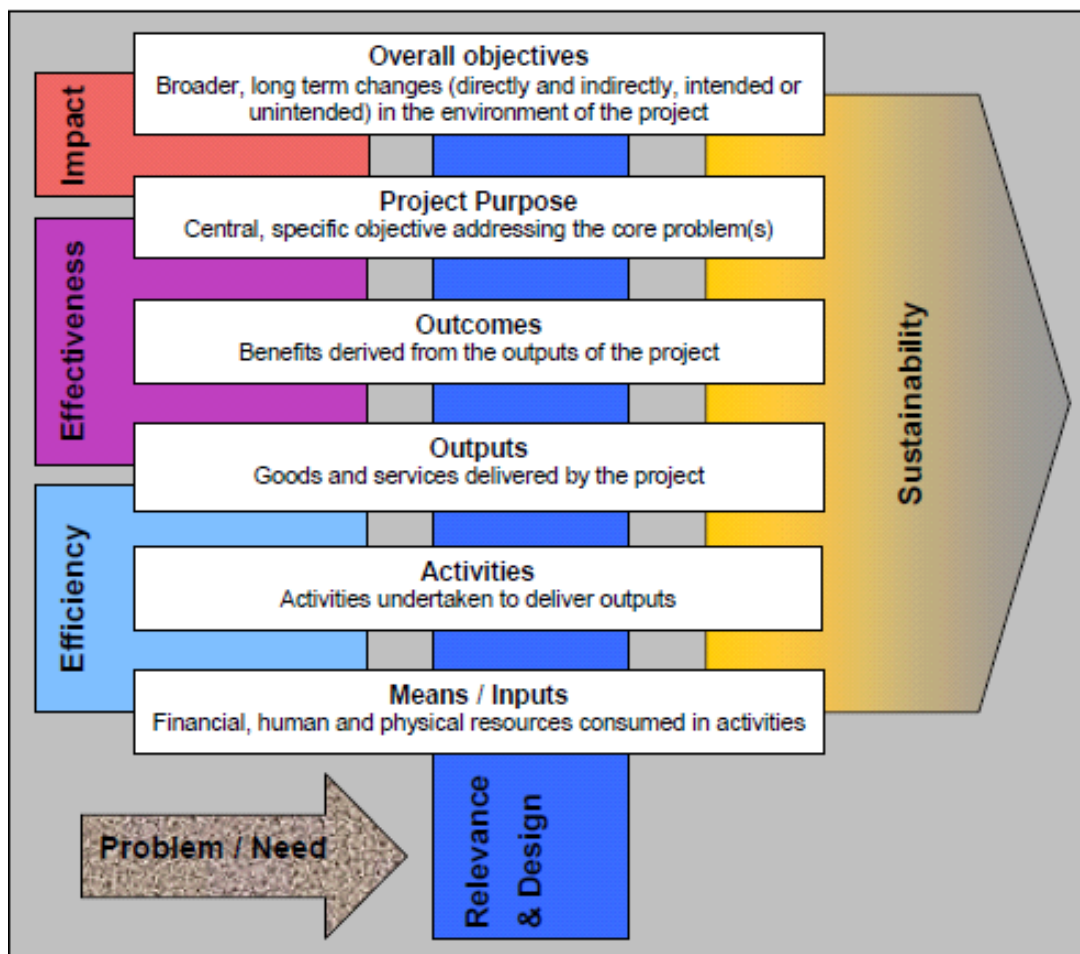
### 1.7.2 EC RESULTS ORIENTED MONITORING (ROM) MODEL

The RC (ROM) impact chain is a slightly different representation of the same model as presented by GTZ (see Figure 2-2). The impact chain is divided into six components. The first three which talks about the means, activities and outputs are the components in direct control of the management. The element that is focus of measurement here is efficiency. Efficiency here will imply that the project/programme was able

to deliver the product that was promised using the defined means, within budget and on specified time. The management should also ensure the quality of the product being produced. This implies that outputs have an overlap with monitoring for efficiency as well as effectiveness.

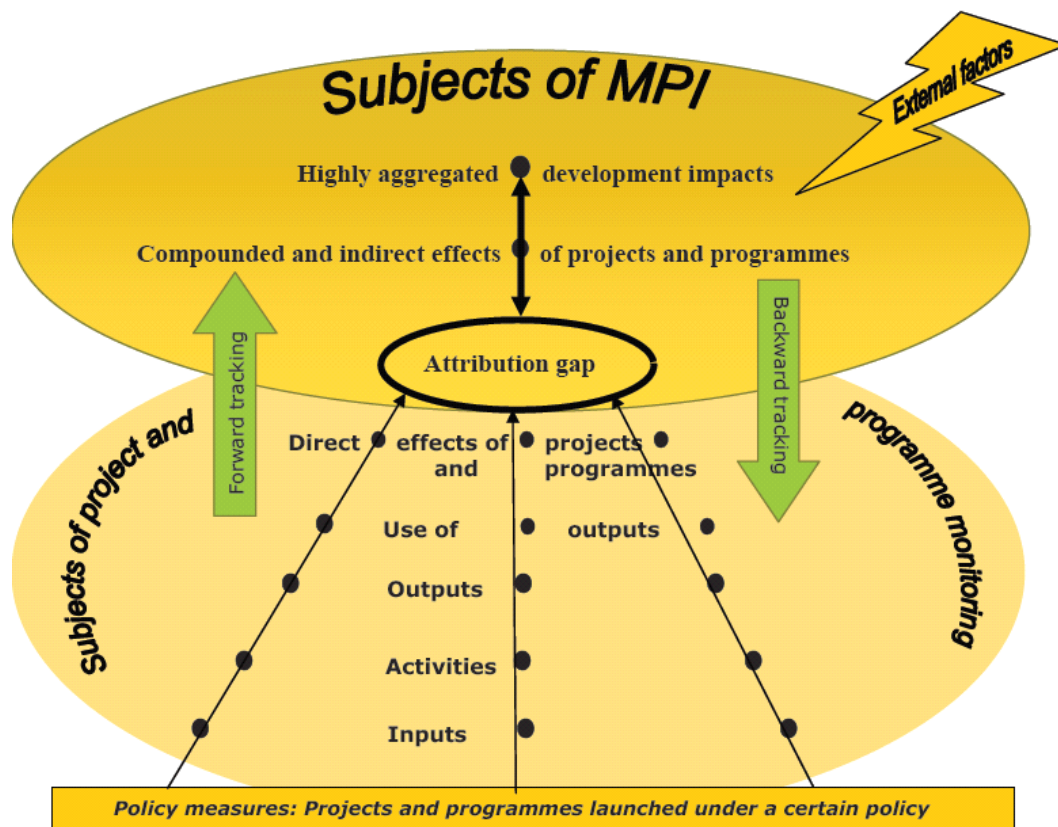
The outcomes as a result of the outputs imply the effectiveness of the project/programme. Outcomes are defined as the direct benefits of the output. Comparing this element with GTZ outcomes assume that the outputs are being used appropriately for the purpose they were designed. These outcomes then imply if the project has been able to rectify the core problem area. For example, if the problem area was the 'EU ban on Fish Export', so has the development (output) and appropriate implementation (outcome) of a robust SPS system managed to lift the ban (Project purpose). Finally, if the ban has been lifted this will imply that exports and employment will increase which will contribute to poverty reduction (overall objective).

**FIGURE 2-3: EC (ROM) IMPACT CHAIN**



The FAO model is a simple representation of the GTZ model (see Figure 2-3). The model like GTZ suggests that inputs, activities, outputs, use of outputs and direct benefits can be monitored within the project scheme, however, the indirect benefits are separated through the attribution gap. It also suggest that the monitoring should be in both directions. The programme should monitor that whether activities, outputs and outcomes are leading towards the direct and indirect effect and also if the indirect and direct effect would be achieved by taking certain activities, outputs and outcomes.

FIGURE 2-4: FAO IMPACT CHAIN



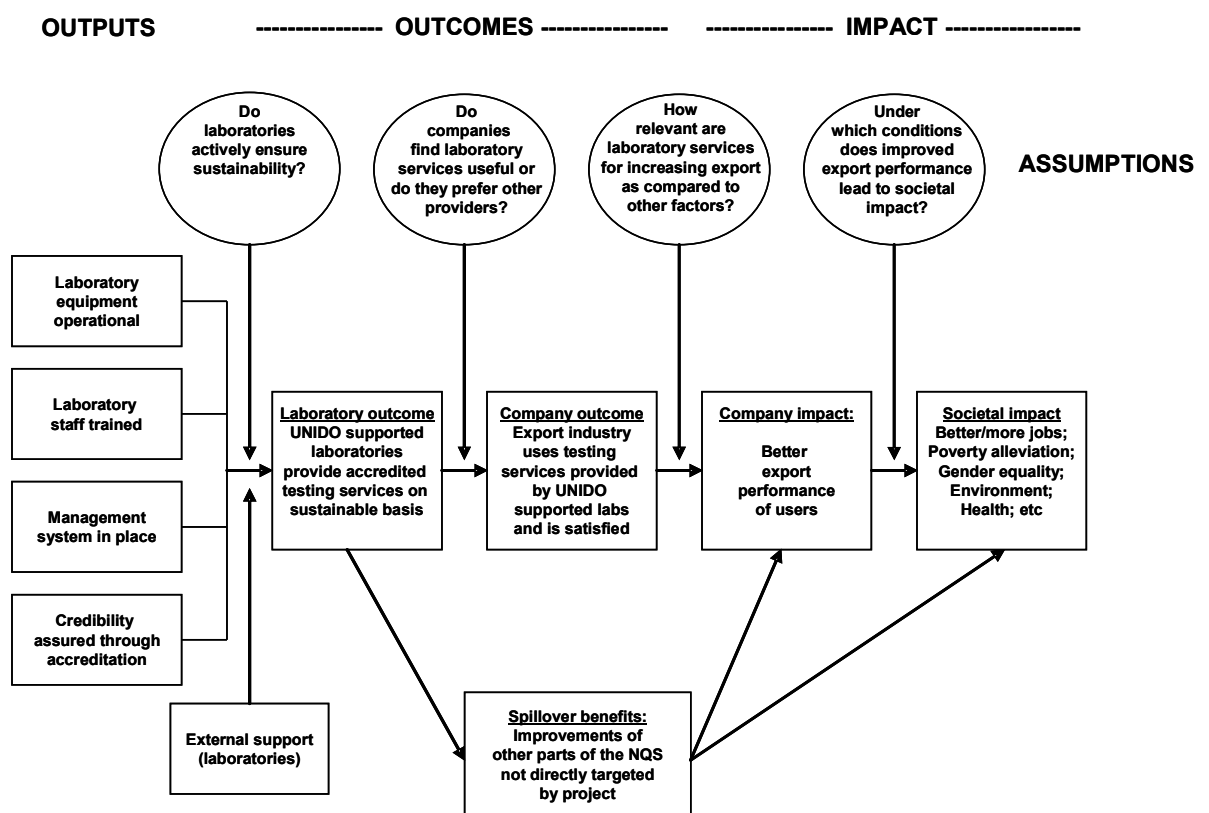
#### 1.7.4 UNIDO

The model developed by UNIDO (Sri Lanka) also identifies similar key components that form part of the overall monitoring (see Figure 2-4). The



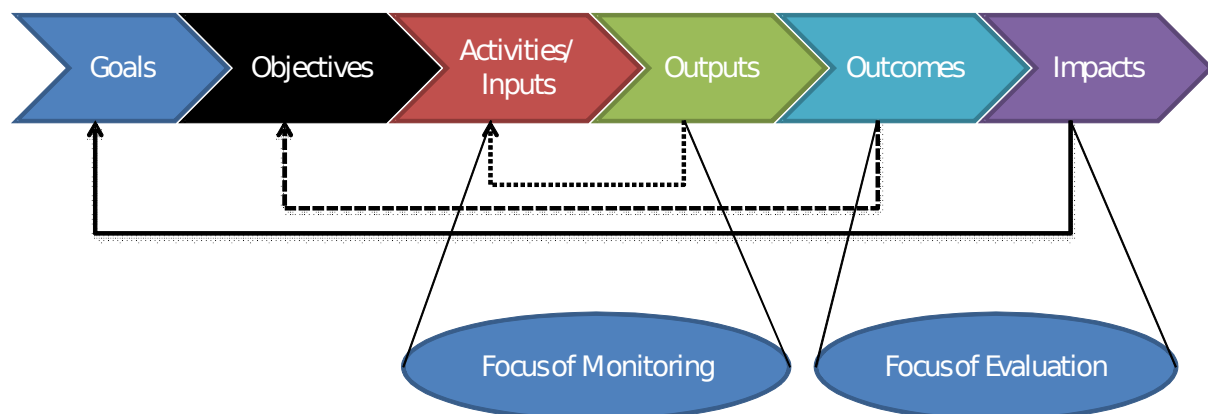
things that fall under outputs measure similar things which are covered under the activities and products of the GTZ impact chain. The outcomes involve appropriate and satisfactory use of the outputs produced under the model. Finally the impacts are split as direct which is looking at company level and indirect which is looking at the society level. This is similar to the direct effect and indirect effect presented in the GTZ model. An additional component in the UNIDO chain is framing of certain assumptions. The analysis involves answering certain questions about usability and relevance as the project progress through the impact chain.

FIGURE 2-5: UNIDO IMPACT CHAIN (SRI LANKA)



The discussion above suggests that there are no stark differences between the impact chains models developed by various agencies. Each impact chain example talks about monitoring of what is in direct control and evaluation of what is not. As Figure 2-5 shows, monitoring work focuses on the progress and tracking of inputs, implementation of activities and production of outputs. Evaluation tends to take place at specific points/stages in a project and permits an assessment of progress over a longer period of time. The focus is on tracking changes in relation to outcomes (with reference to objectives) and impact, in terms of the project goals.

**FIGURE 2-6: PLACE OF MONITORING & EVALUATION IN THE PROGRAMME LOGIC**



## 1.8 DEFINITIONAL CLARITY

Monitoring and Evaluation is a complex activity as it involves several stakeholders, users, information providers. Hence, before defining a framework it is absolutely essential to agree on a set of definitions that explain the key components of the impact chains. The models depicted above generously use the works inputs, activities, outputs, outcomes and impacts. We have provided clear definitions for each to these terms to ensure that each stakeholder involved in the process refers to the correct definition of the component of the impact chain.

### 1.8.1 INPUTS

The resources that will be used including people, money, expertise, technology and information to deliver the activities/tasks of the

project/program. It is usual to monitor the inputs and activities providing information for analysis and ultimately data for an evaluation.

#### 1.8.2 ACTIVITIES

The actions taken or the work performed as part of an intervention. For example, the provision of technical advice, training sessions, facilitation of meetings or events etc Activities utilize inputs, such as funds, technical assistance and other types of resources to produce specific outputs. Essentially activities or tasks are what the project will 'do'.

#### 1.8.3 OUTPUTS

These are the immediate results derived from the activities of the project. These outputs might be directly experienced by those being targeted by the intervention e.g. training advice or indirectly through outputs like reports, mapping of a situation etc.

#### 1.8.4 OUTCOMES

These are the short-term and medium-term results of an intervention's outputs, usually requiring the collective effort of partners. Outcomes represent changes in conditions that occur between the completion of outputs and the achievement of impact. Reductions in the number of procedures or cost of registering a business are outcomes from a business simplification project. Outcomes also cover the appropriate and efficient use of outputs. It is usual to evaluate outcomes providing information for analysis and ultimately data for impact assessment

#### 1.8.5 IMPACTS

Positive and negative, long-term results/benefits for identifiable population groups produced by an intervention, directly or indirectly, intended or unintended. In the case of TRTA II interventions, impact would include changes such as higher exports, income generation and poverty alleviation.

#### 1.8.6 INDICATOR

A quantitative and/or qualitative variable that allows the measurement and verification of changes produced by a development intervention relative to what was planned. For example, a typical outcome indicator for provision of a laboratory is the 'number of businesses benefitting for the laboratory'.

#### 1.8.7 TARGETS

Indicators are a means by which change will be measured; targets are definite ends or amounts which will be measured. A target is an explicit statement of the desired and measurable results expected for an indicator

at a specified point in time. Targets should be expressed in terms of quantity, quality and time. For example, 5 laboratories accredited.

#### 1.8.8 MILESTONES

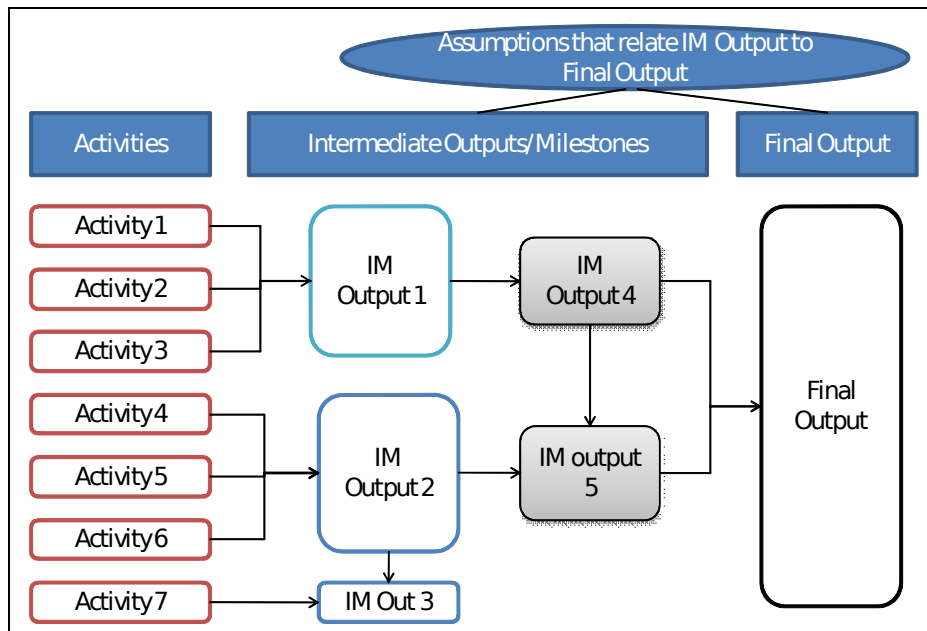
Significant points in the lifetime of a project. A particular point in the project by which specified progress should have been made.

### 1.9 PROPOSED FRAMEWORK FOR 'IMPLEMENTATION MONITORING'

As discussed in Section 1.1 the purpose of this report is to only develop a framework for implementation monitoring. As shown in Figure 2-5 the monitoring only focuses on inputs and outputs, whereas the evaluation focuses on outcomes and impacts. The sections above have so far referred generally to the complete impact chain, however, this point onwards we will only refer to the monitoring of activities and outputs.

The proposed 'implementation monitoring' framework comprise of two schedules. The first one is called the 'output mapping' which helps the person monitoring the programme understand the overall logic of the intervention. The output mapping will show the linkages between activities resulting in intermediate outputs which then result in an overall output. The template structure of output mapping is provided below (see Figure 2-6). The second schedule is the 'monitoring schedule'. This will help the person monitoring the programme keep track of the agreed intermediate outputs/milestones. This is presented in a matrix form (see Figure 2-7) with empty boxes where the reviewer can fill in information on a quarterly basis to determine progress made towards achieving the final output.

**FIGURE 2-7: TEMPLATE OF OUTPUT MAP (SHADED BOX INDICATE OUTPUT FOR MEASUREMENT)**



**FIGURE 2-8: TEMPLATE OF A MONITORING MATRIX**

Final Output	Intermediate Outputs/ Milestones	Planned Start Date of Intermediate Output	Planned End Date of Intermediate Output	Quarterly Monitoring - State % of work completed								Quality Assurance of INT Outputs		Are intermediate outputs leading to Final Outputs?	Quality Reviewer	Verification means/ source of final output
				Monitoring Frequency	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Quality Reviewed			
For Example PITAD's Capacity Strengthened	IT Systems updated	1 January 2011	31 December 2011	% completion of work				*						Yes	UNIDO & PITAD	Physical verification of IT Systems/ PITAD Official Notification
				% budget spent									No	<b>Remarks</b> New IT systems are improving quality of work.		
												In process				
Staff Evaluation Completed	1 January 2011	31 December 2012	Each of these intermediate outputs can be tracked. This matrix can be filled in by the Monitoring person quarterly and a brief report of comparisons can be produced highlighting the progress, reasons for delay or course correction.													
8 Staff Trained	1 January 2011	31 December 2012														
8 Trained Staff certified	1 January 2011	31 December 2012														
Linkages with foreign institute developed	1 January 2011	31 December 2012														

This marks the expected delivery of output

Information for First 4 columns will be provided in initial framework	Information for next 3 columns will be filled in quarterly by the monitoring person	Information in last two columns will
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The methodology we have used for identifying outputs is output mapping. This requires a clear distinction between the inputs and activities of the programme and their final outputs. Central to defining the final output was that, if possible, it should be related to an impact.

Output mapping allows the analysis to move backwards from the final outputs to intermediate outputs, which contribute to them, to the inputs

of the intermediate outputs. Once the inputs and the outputs are identified, then the relationships between them are clarified. When conducting the monitoring the output map can then clearly identify the key points that need to be recorded and measured. The laying of output plan makes it easier to construct the monitoring matrix. The other advantage of output map is that it can also be expanded easily to dwell on the impact analysis. Output maps will make it clear as to what will be measured and to what impact it should be linked up with.

As stated in the paragraph above, the output map can very easily be used to construct the monitoring matrix which is preselected in figure 2-7. The output map can be used to fill in the first four and the last two columns of the monitoring matrix before the start of the monitoring progress. Then at defined quarterly intervals the person responsible for monitoring can easily fill up the template with the progress made. This progress can be recorded by conducting brief interviews of the stakeholders responsible for delivering an output and those receiving the output. Progress can also be monitored by physical verification where outputs involve tangibles. The financial budgets can also be recorded to see if outputs are being achieved efficiently. Finally, the monitoring person should also make a judgment about the quality assurance of the outputs being produced. This can be done by either physically reviewing the output against its terms of reference, or doing a brief recipient satisfaction survey. As this monitoring is done on a quarterly basis it makes it easy to follow what progress has been made and where the programme is in terms of delivery of final outputs. **The 'monitoring matrix' is developed as a tool in Microsoft Excel so that it becomes easier to complete and conduct analysis.**

#### 1.10 MONITORING SCHEDULE

It is recommended that the performance matrix is completed and reported on every quarter.

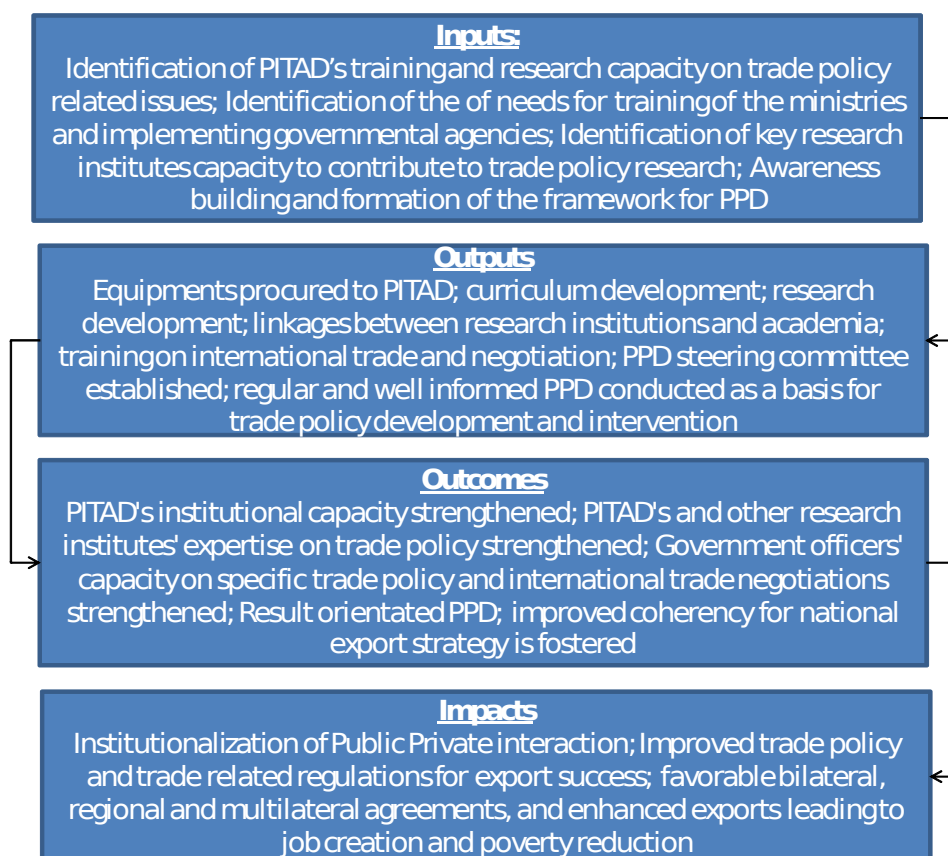
#### 1.11 MONITORING & REPORTING RESPONSIBILITY

It is recommended that UNIDO should complete the monitoring sheet and discuss the progress with the focal person from PITAD. The UNIDO Expert and PITAD's focal person should then summarize a short monitoring report for the Secretary (MoC). These reports should be completed in the first week of every new quarter covering the performance of the previous quarter. The two quarterly reports will form an integral part of PSC meetings to be held every 6 months.

## 2 MONITORING FRAMEWORK FOR COMPONENT 1 OF TRTA II

Like other developing countries trade policy and strategy formulation in Pakistan is dysfunctional and lacks adequate implementation. This was confirmed through initial stakeholder surveys done by UNIDO and ITC, where private sector attitudes demonstrated that they had little or no confidence in the government's negotiators on trade. They felt that the government has so far been unable to articulate a coherent trade strategy that represents the broader economic interests of the country and have failed to build wider stakeholder ownership. This has resulted in even less than partial implementation of past trade policies. These problems have formed the basis of justifying a dedicated intervention of the TRTA II programme for Pakistan. The broad spectrum of intervention designed in this area is presented in Figure 3-1 below:

**FIGURE 3-9: BROAD PROGRAMME DESIGN OF COMPONENT 1**



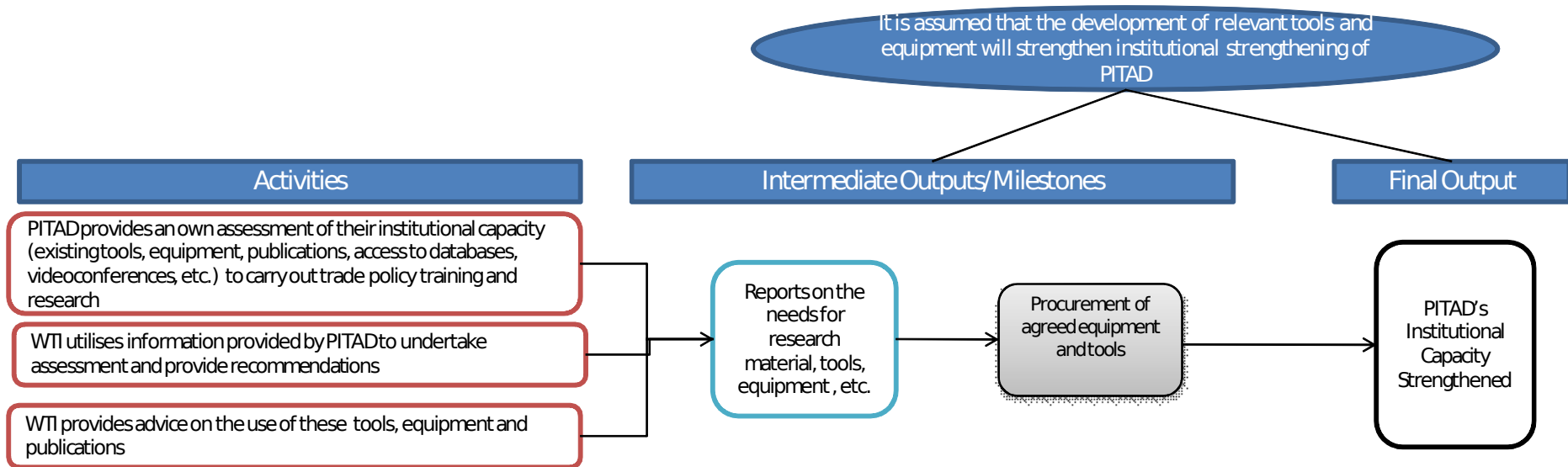
### 2.1 OUTPUT MAPS FOR COMPONENT 1

Below we have produced output maps for each of the sub-components of the Trade Policy capacity Building interventions being implemented by ITC. The grey boxes in the output maps provide critical outputs. Most of these outputs are related to programme level impacts. The monitoring

matrix will focus on achieving compliance with these critical outputs. We have also provided intermediate outputs to determine the performance relative to the final output.

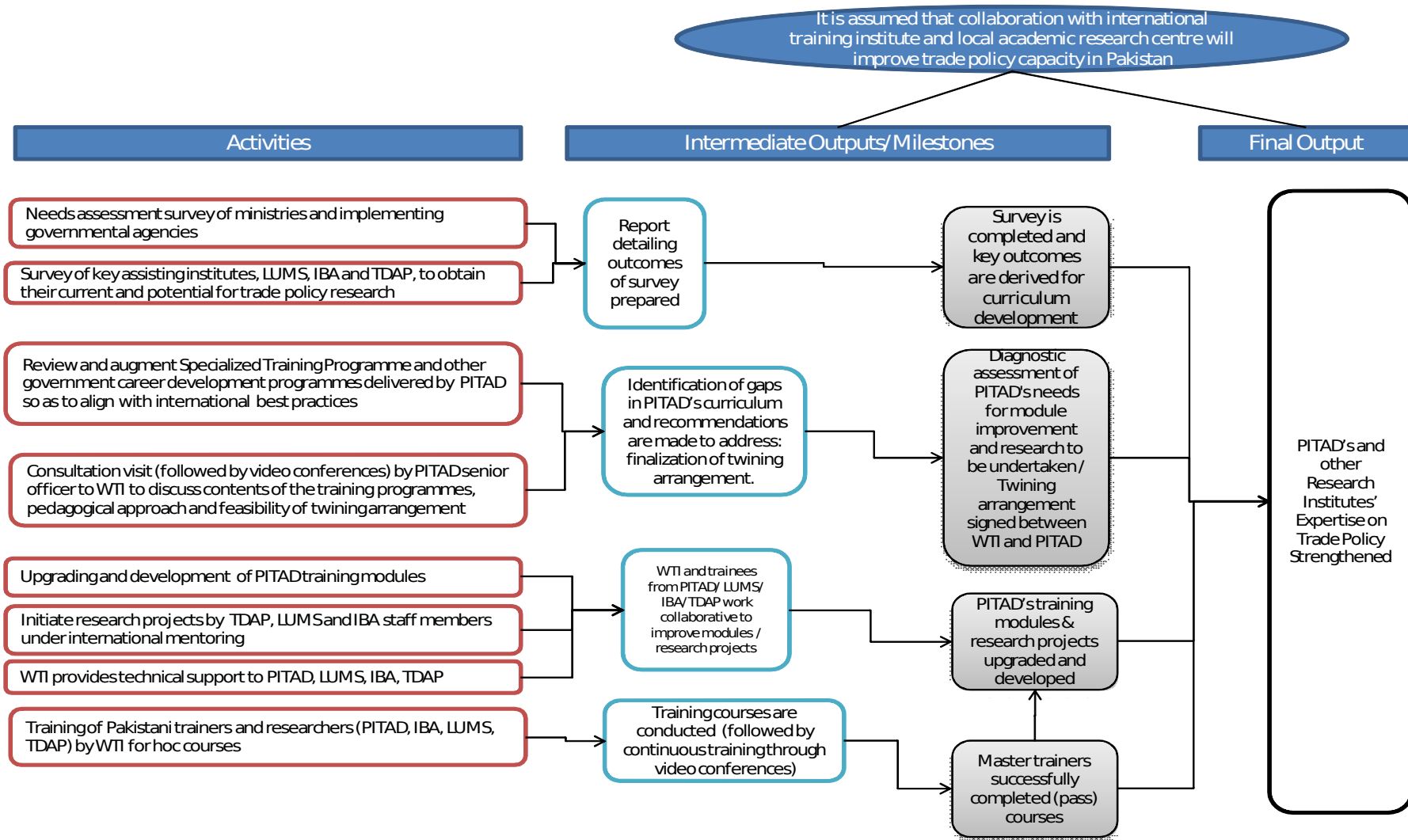


**FIGURE 3-10: OUTPUT MAP FOR COMPONENT 1.1: STRENGTHENING PITAD'S INSTITUTIONAL CAPACITY**

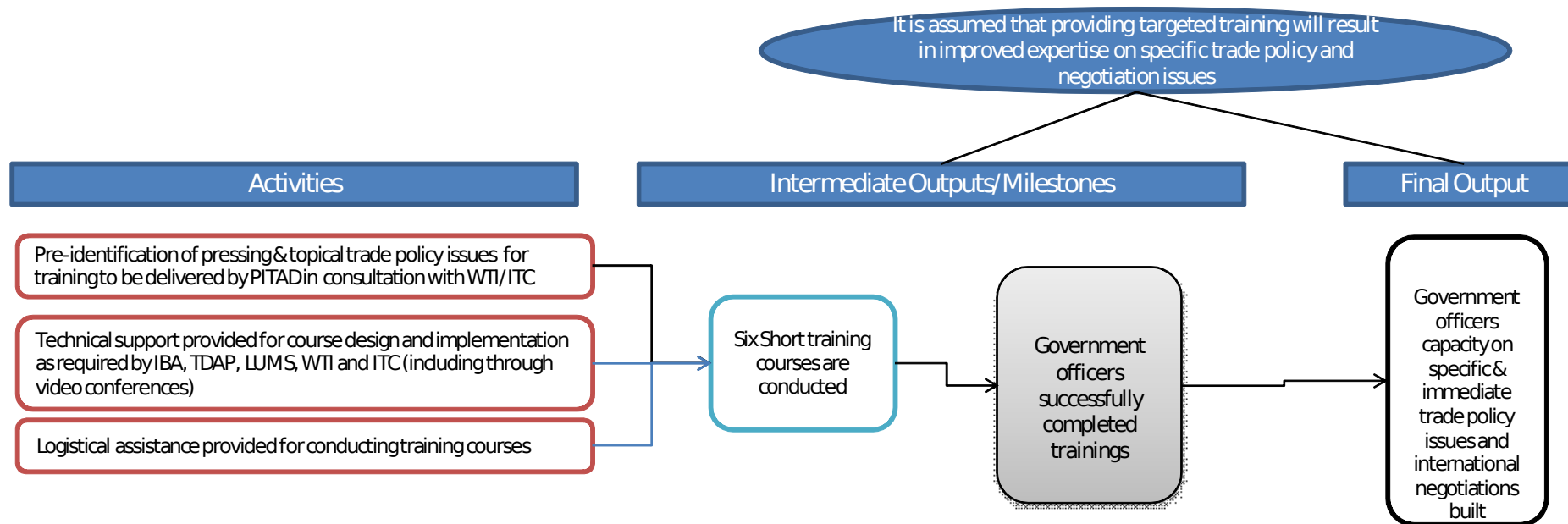


The grey boxes represent the key milestones that will be achieved under this subcomponent. This activity will continue to produce outputs during 2010 - 2014.

**FIGURE 3-11: OUTPUT MAP FOR COMPONENT 1.2: STRENGTHENING PITAD’S & OTHER RESEARCH INSTITUTIONS’ EXPERTISE OF TRADE POLICY**

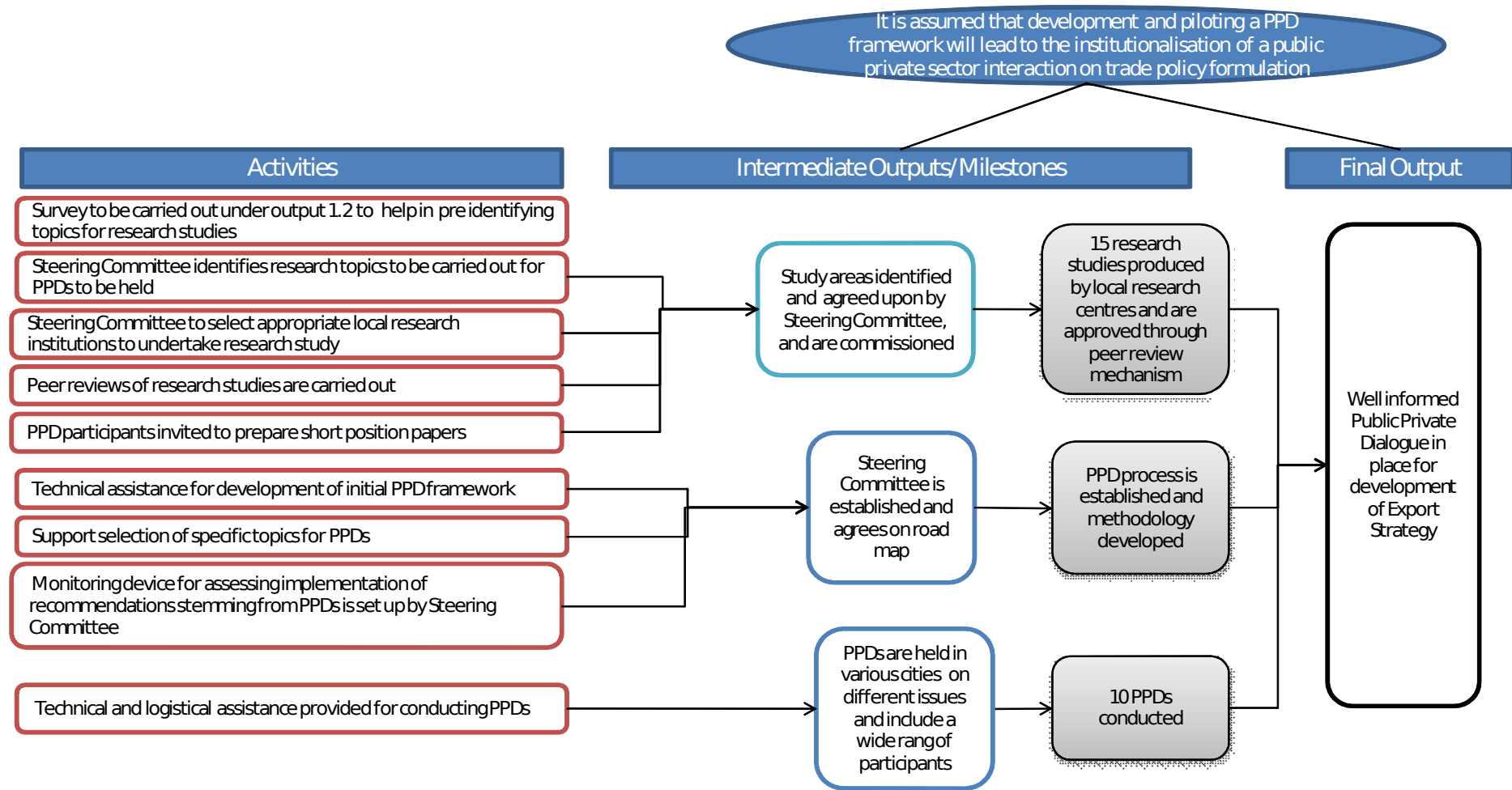


**FIGURE 3-12: PRODUCT MAP FOR COMPONENT 1.3: STRENGTHENING OF GOVERNMENT OFFICERS CAPACITY**



The grey boxes represent the key milestones that will be achieved under this subcomponent. This activity will continue to produce outputs during 2010 - 2013.

**FIGURE 3-13: PRODUCT MAP FOR COMPONENT 1.4 & 1.5: CONDUCTING RESEARCH STUDIES & DEVELOPMENT OF A PPD FRAMEWORK FOR TRADE POLICY**



The grey boxes represent the key milestones that will be achieved under this subcomponent. This activity will continue to produce outputs during 2011 - 2014.

### 3 MONITORING FRAMEWORK FOR COMPONENT 2 OF TRTA II

The producing sectors of Pakistan have historically suffered at the hands of overall low level of international competitiveness. The inability of Pakistani products to compete in international markets has been a result of several ingrained issues such as; (i) inadequate human resource and lack of clearly defined performance indicators for service providing institutions, (ii) limited investment in modern efficient techniques, (iii) poor data management, (iv) non-existent productivity indicators for businesses, (iv) lack of product diversification and (v) limited capacity of the products to meet international quality, health and social standards. The last problem is further augmented by limited available infrastructure to credibly test for such international requirements. In order to address these problems TRTA II has taken a three pronged approach. The programme includes; (i) interventions to strengthen the SPS controls, (ii) interventions to improve quality, value addition and compliance in fishery, horticulture and industrial sectors and (iii) interventions to improve conformity assessment infrastructure and services.

The initial challenge faced by the programme was to select a few sectors from a whole range available in Pakistan. In the development phase UNIDO studied in great detail several sectors which included, (i) Horticulture (Citrus and mango Fruits), (ii) Fisheries, (iii) Fan manufacturing industry, (iv) Cutlery and Steel Ornament manufacturing industry, (v) Surgical Instruments manufacturing industry, (vi) Sports Goods manufacturing industry and (v) Textile industry. Given the limited budget under the programme it was realized that designing interventions in all the above sectors will spread resources too thinly and it will be difficult for the programme to make an impact. The overall programme objective was poverty reduction through competitive exports.

We analyzed the sectors carefully and were able to conclude the horticulture and fishery were the prime sectors where the programme will

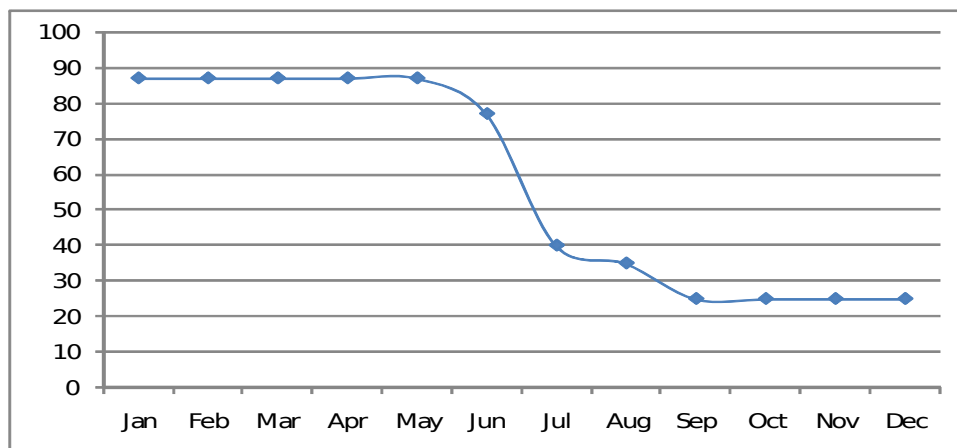
work. Both of these sectors employ a significant amount of 'low income' group labour force and also has the capacity of not only augmenting incomes but also create more employment. When looking at the manufacturing sector we looked at a few critical indicators to determine where UNIDO's support could make the maximum dent to poverty. We selected the fan industry and the cutlery industry.

UNIDO decided to intervene in these sectors primarily because these sectors had been without any government support from several years. Both these sectors had a reasonable local demand and large export potential. We did competitiveness analysis and found the Pakistan's relative growth rate in both these product areas was higher than the key players, however, the market shares were only a tiny fraction. The RCA's for both these industries were less than one suggesting the support is justified to improve their competitiveness. Moreover, both are pro-poor sectors.

Currently only 10% of the fan industry has developed capacity to export. The remaining industry is heavily reliant of the local market. The consumption of fans is only seasonal and hence the industry only operates at around 20% capacity during seven months of the year (See Figure 4-1). This results in excessive unemployment in the Gujrat region where the fan industry is predominantly located. We also looked at regional indicators for Gujrat in terms of unemployment, literacy, health facilities, basic utilities and found that they were less favorable as compared to the areas where the other industries are located. Moreover, compliance is also a basic concern of the fan sector, significantly restricting its exports.

For similar reasons Cutlery sector was selected. Cutlery sector is predominantly located in Wazirabad which again is a pro-poor region and has been a neglected sectors for several years. This neglect has resulted in industry shrinking to around 400 units from 800 units in the last decade. However, the trend recently has reversed. This has created a lot of unemployment and loss of skill in the region. Hence, it is anticipated that the programme can make maximum impact in this sector.

**FIGURE 4-14: FAN INDUSTRY CAPACITY UTILIZATION OVER A TYPICAL 12 MONTH CYCLE (%)**



Source: UNIDO Field Surveys

However, once the sectors were selected and the implementation activities were chalked out the real issue was to come up with realistic

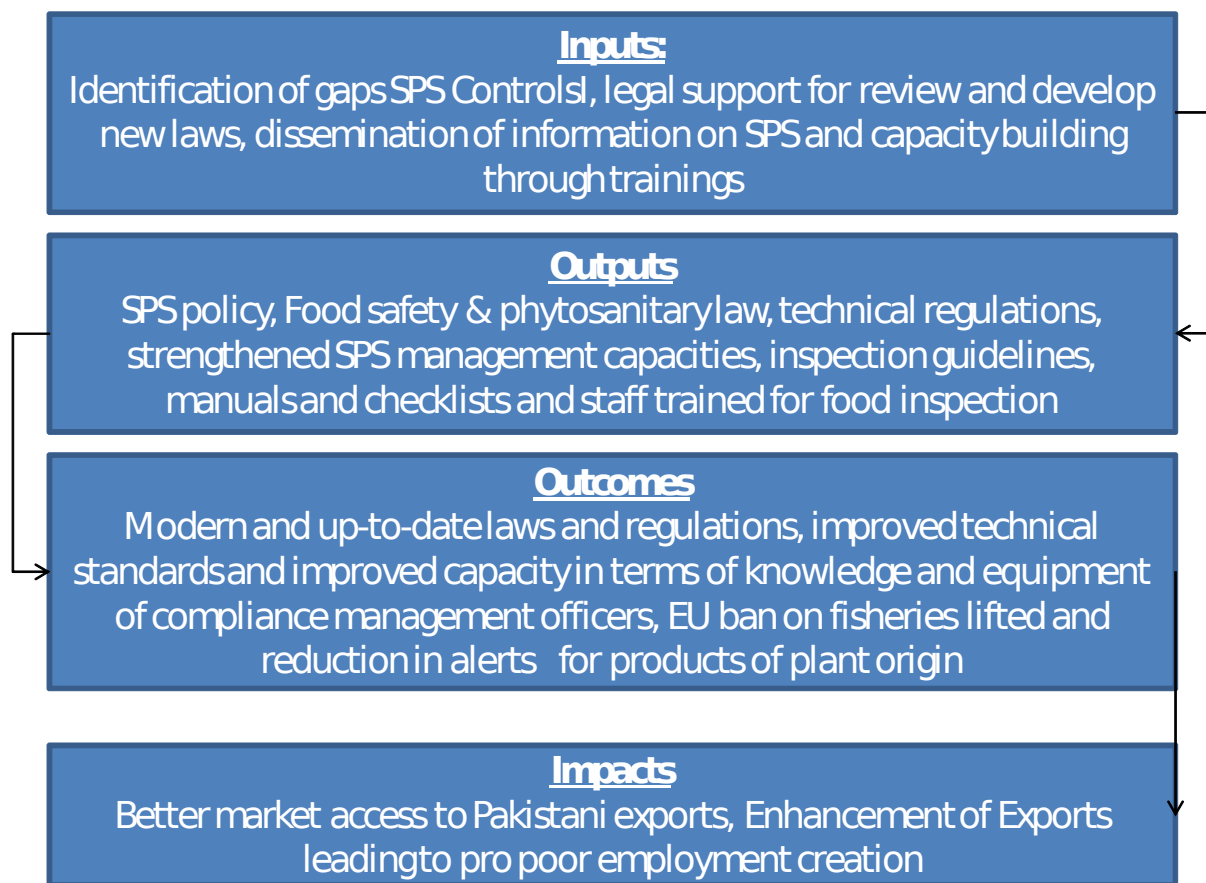
and measurable indicators that can help UNIDO/TRTA management to drive change leading to the overall programme objective.

### 3.1 STRENGTHENING SPS CONTROLS

The programme identified that in Pakistan, there exists systemic failure of food safety, plant health and animal health controls. Especially in case of fisheries product exports to EU remained closed due to non-compliance EU sanitary requirement. The EU rapid alert system for food and feed (RASFF) has continued to publish rapid alert notices in respect of Pakistani food and horticulture products imported in the country. In Pakistan institutions related to SPS controls lack awareness and modern SPS management systems which hamper the development of control systems. The relevant institutions for animal and plant health control focus exclusively with import and export controls and no attention is paid to integrate activities with controls applied at domestic level. In particular, there is no single organizational focus of responsibility at federal level for food safety. The TRTA II intervention design for this area is depicted below in figure 4-2.

**FIGURE 4-15: BORAD PROGRAMME DESIGN FOR SPS MANAGEMENT SYSTEM STRENGTHENING**





### 3.2 IMPROVING QUALITY, VALUE ADDITION AND COMPLIANCE IN FISHERIES, HORTICULTURE AND INDUSTRIAL SECTOR

This component of the programme aims to achieve improved quality, value addition and compliance of business operators in the export supply chain. The programme formulation mission had identified sub-optimal export performance in a number of key sectors, especially in relation to fisheries and horticulture products, and a number of industrial sectors. Fishery product suffers from insanitary conditions on fishing vessels and at landing sites, and lack of ice and refrigeration. Mango and kinnow export supply chains lack rapid chilling facilities immediately post harvest. There is a poor quality management in plants packaging for exports. Post harvest losses are high in all food sectors. Common cross sectoral constraints identified were the lack of compliance with international regulations, poor quality management by enterprises, poor handling of produce and lack of understanding of customer needs. There are several instances where due to these issues Pakistani exports have been rejected

by destination markets or have only managed to achieve relatively low market prices and subsequent losses of market shares.

The impact of this activity would be multilayered. In the first instance this intervention will increase the competence of the NPO through strengthening their pool of consultants who in turn will provide credible services to the industry on sustained basis. Secondly, these interventions will support the industry in improving its quality and competitiveness by conforming to international/buyers requirements for exports. Finally, this will ensure that the certification system bodies operating in Pakistan provides the credible, accredited and affordable services to the industry. The intervention design for the component is shown in figure 4-3 below:

**FIGURE 4-16: BROAD PROGRAMME DESIGN FOR IMPROVED QUALITY, VALUE ADDITION & COMPLIANCE**

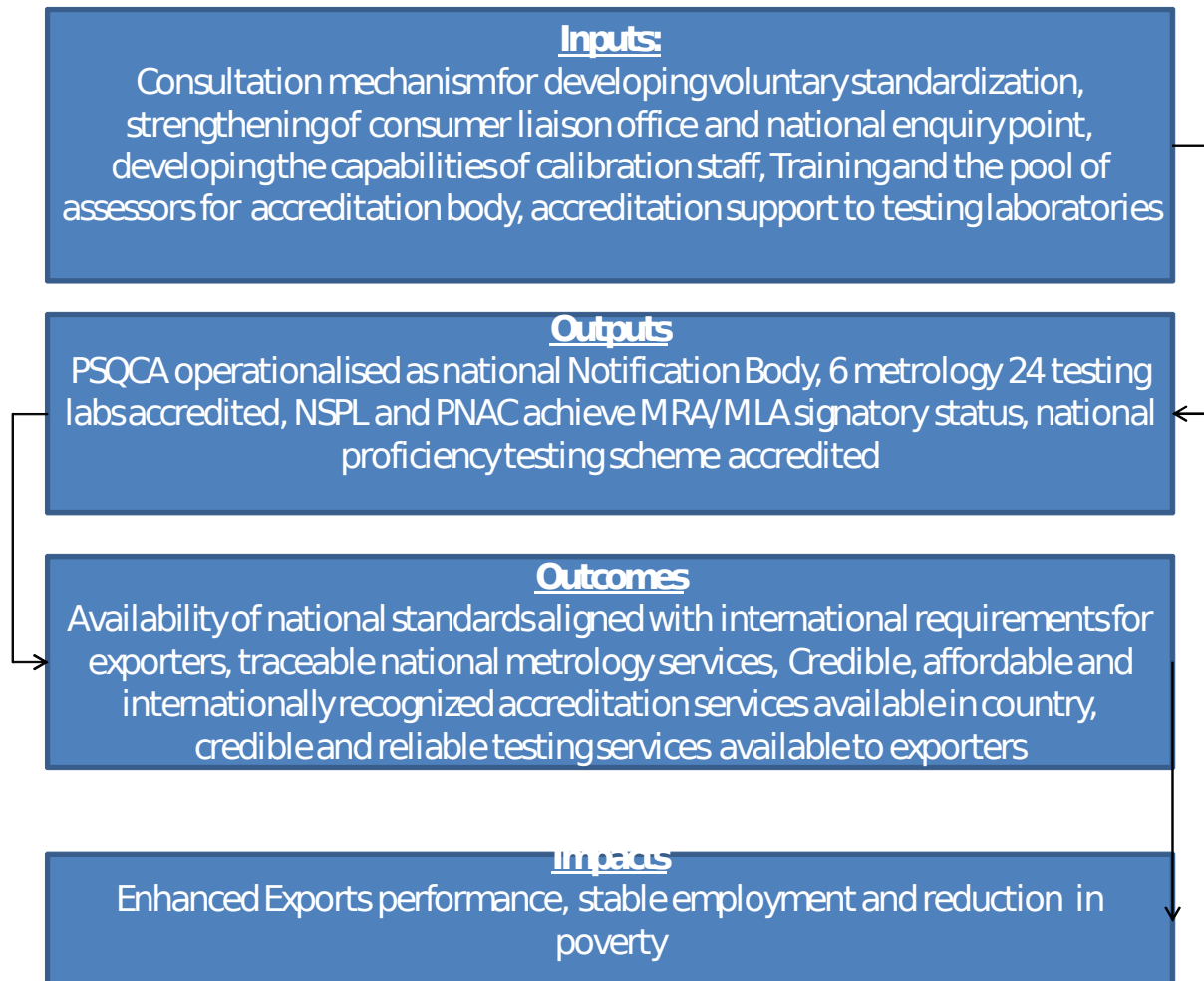


### 3.3 IMPROVED CONFORMITY ASSESSMENT INFRASTRUCTURE & SERVICES

Pakistan has formulated a coherent National Quality Policy Plan (NQP&P) to develop quality infrastructure and guide quality related operations and applications in the country. Compliance and quality issues are the major challenges faced by exporters in Pakistan in gaining increased access to global market. There is limited acceptance in target markets of tests performed in Pakistan and certificates issued in the country. Hence the country needs to improve conformity assessment infrastructure and services. TRTA II activities are focused on developing public national institutions which provide essential services in standardization, metrology,

accreditation and testing quality. The intervention design for the component on conformity assessment infrastructure and services are shown in the figure 4-4 below:

**FIGURE 4-17: BROAD PROGRAMME DESIGN FOR IMPROVING CONFORMITY ASSESSMENT INFRASTRUCTURE**

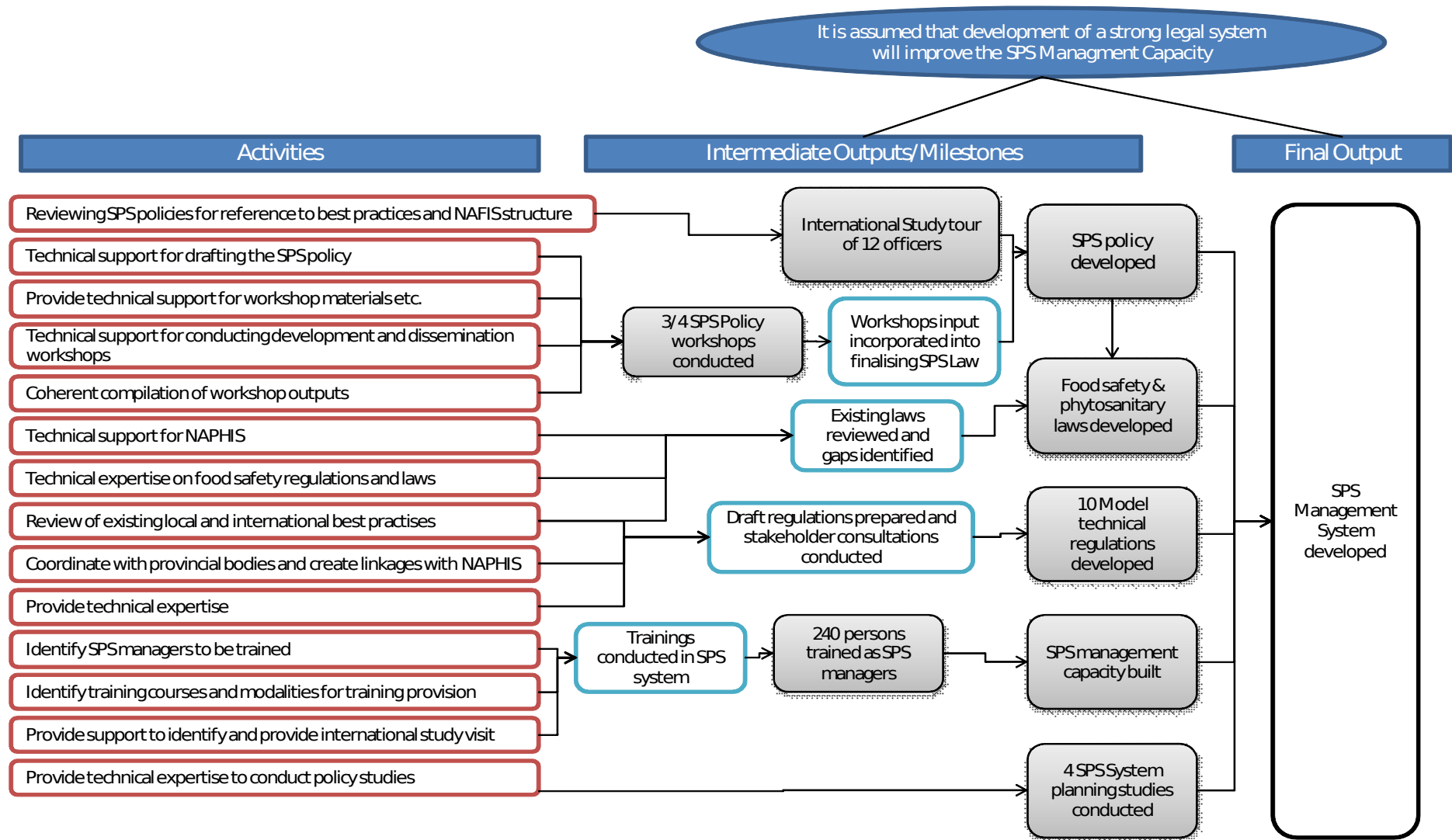


### 3.4 OUTPUT MAPS FOR COMPONENT 2

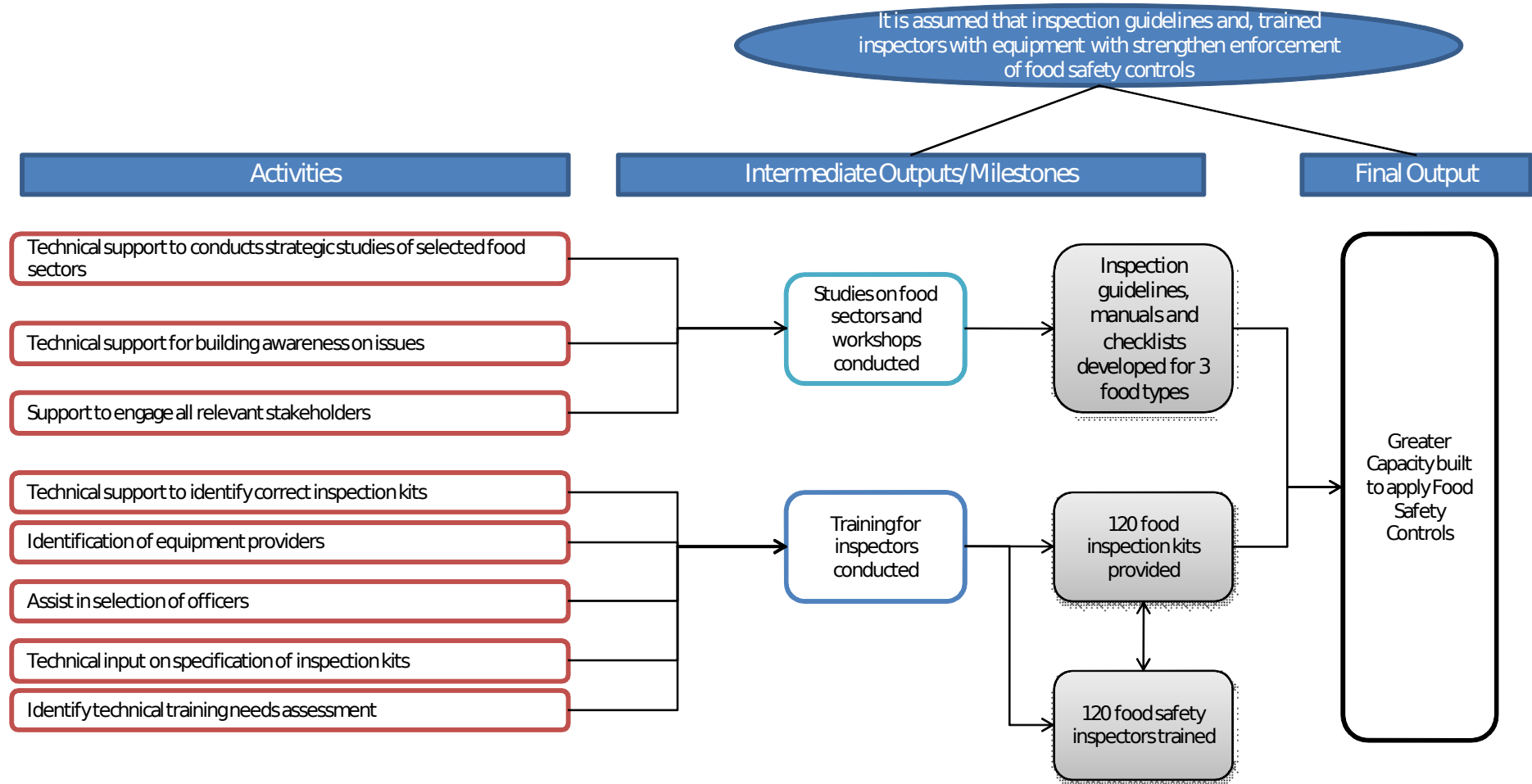
Below we have produced output maps for each of the sub-components of the Export Development Through Improvement of Quality Infrastructure interventions being implemented by UNIDO. The grey boxes in the output maps provide critical outputs. Most of these outputs are related to programme level impacts. The monitoring matrix will focus on achieving compliance with these critical outputs. We have also provided

intermediate outputs to determine the performance relative to the final output.

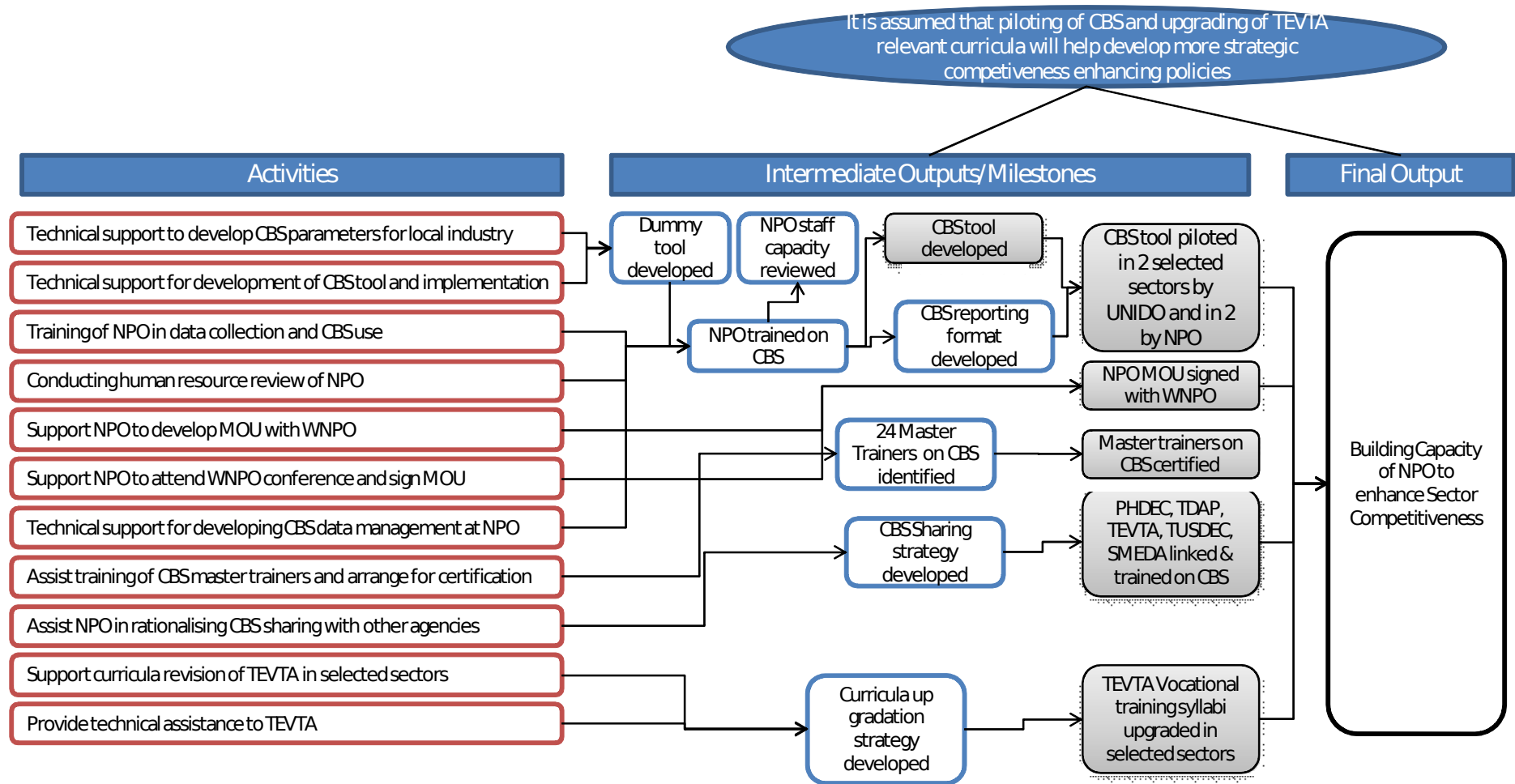
**FIGURE 4-18: OUTPUT MAP FOR COMPONNET 2.1.1: STRENGTHENING THE SPS MANAGEMENT SYSTEM**



**FIGURE 4-19: OUTPUT MAP FOR COMPONENT 2.1.2: MORE EFFECTIVE APPLICATION OF FOOD SAFETY CONTROLS**



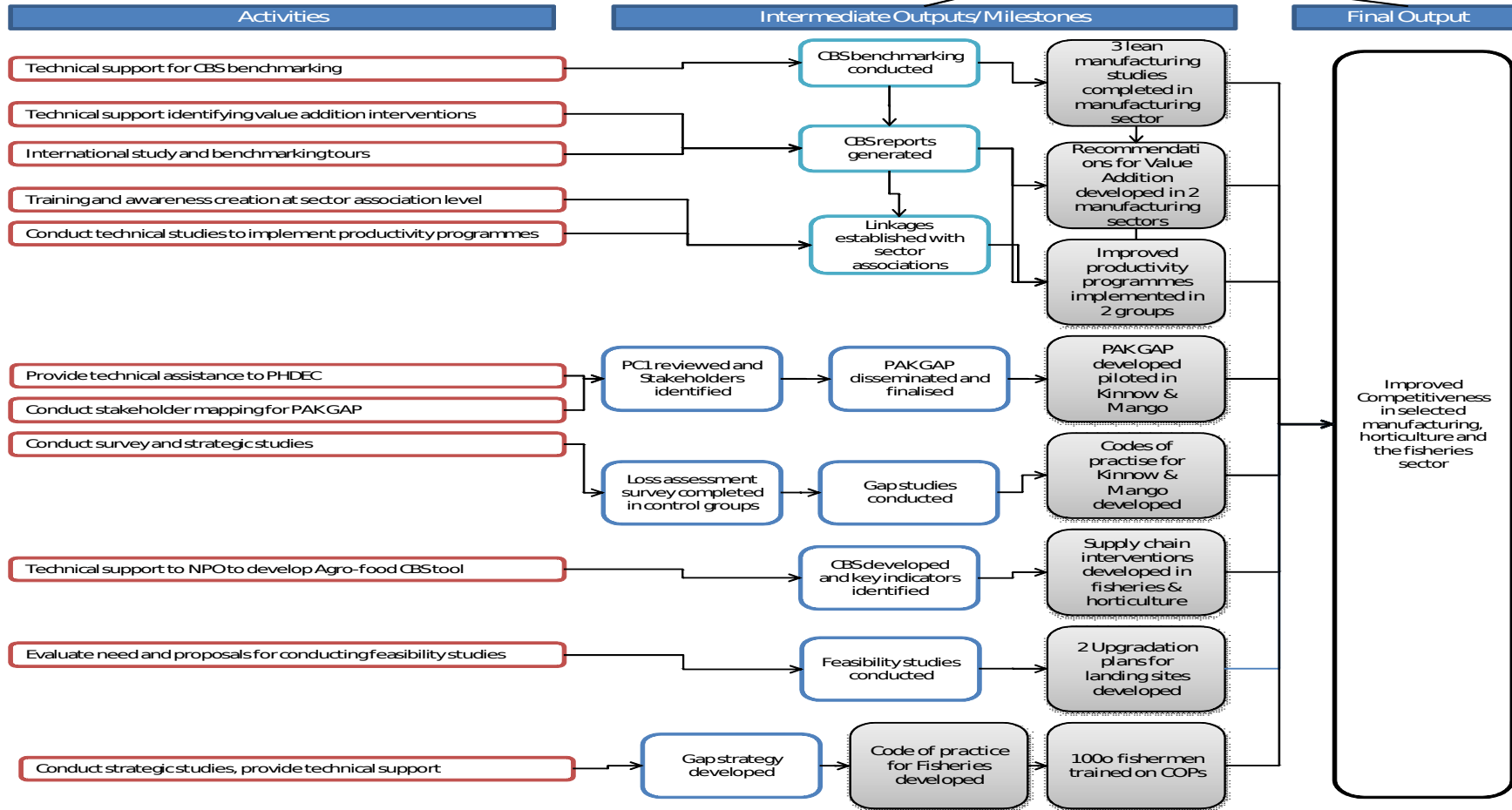
**FIGURE 4-20: OUTPUTMAP FOR COMPONENT 2.2.1: STRENGTHENING THE CAPACITY OF PUBLIC AGENCIES TO ENHANCE COMPETITIVENESS**



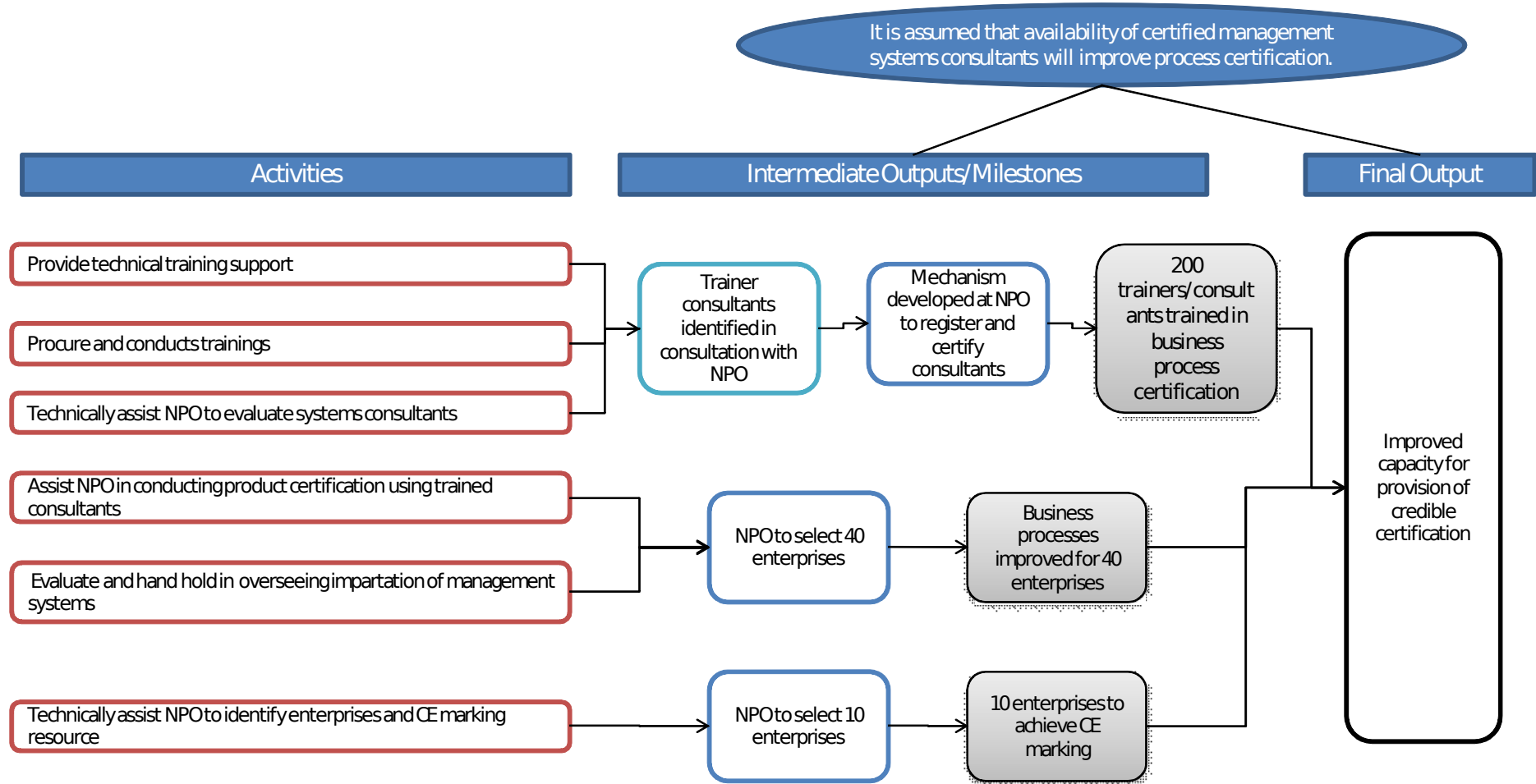
**FIGURE 4-21: OUTPUTMAP FOR COMPONENT 2.2.2, 2.2.3 AND 2.2.4: IMPROVED COMPETITIVENESS IN SELECTED PRO-POOR MANUFACTURING, HORTICULTURE AND FISHERY SECTORS**



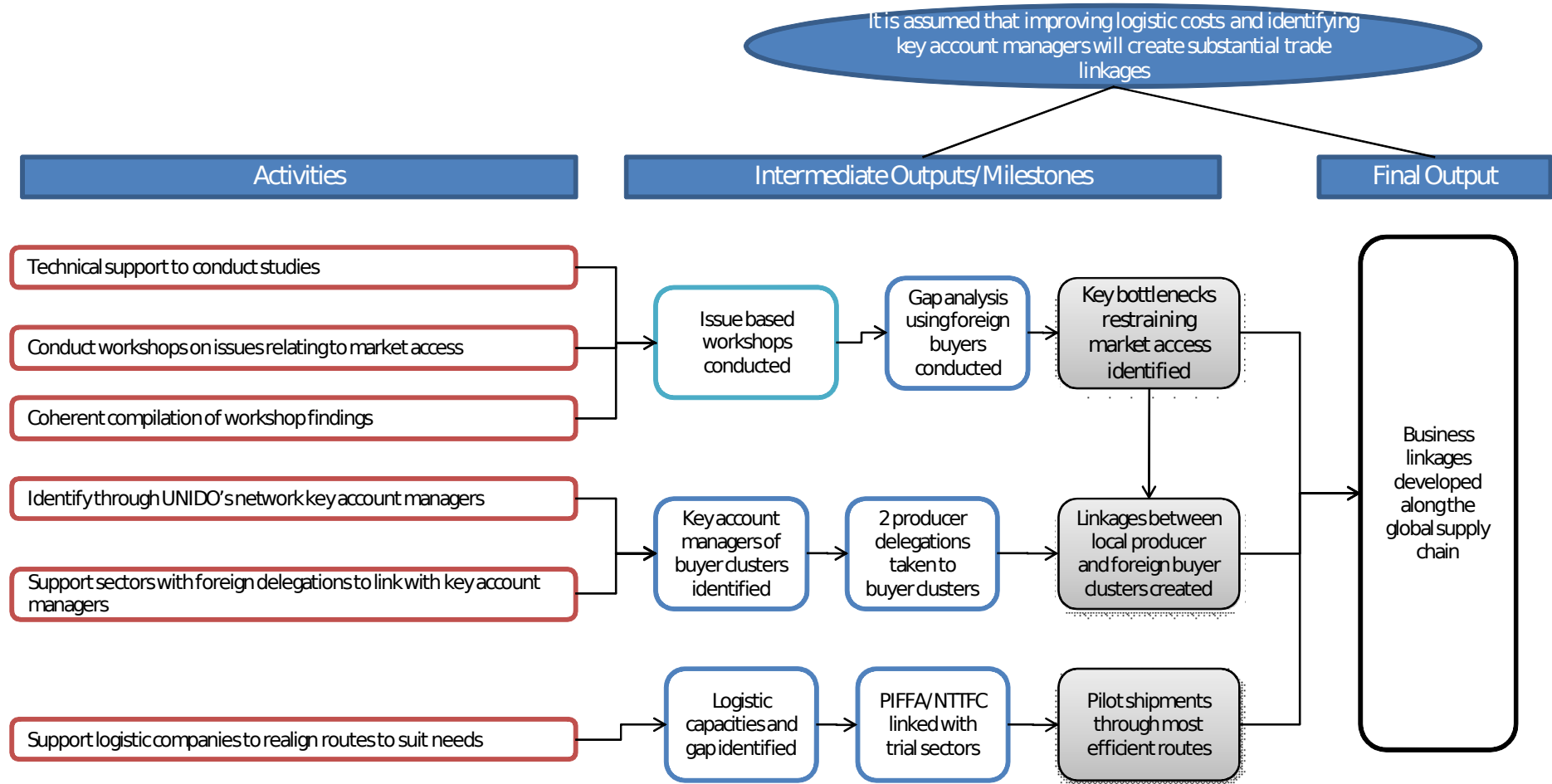
It is assumed the successful implementation of CBS will result in key interventions some of which will be piloted by TRTALI for maximum impact



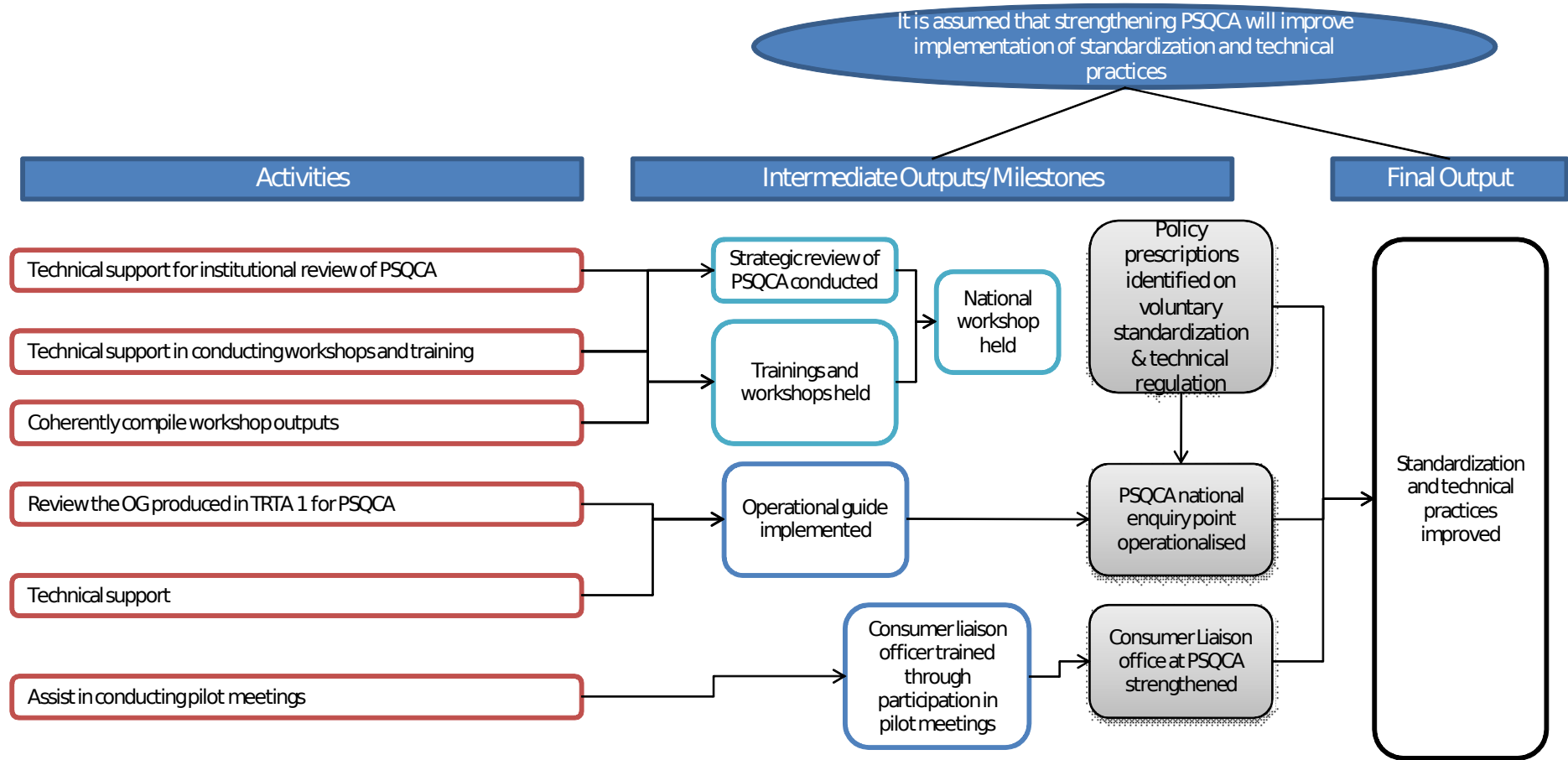
**FIGURE 4-22: OUTPUTMAP FOR COMPONENT 2.2.5: IMPROVED CONSULTANCY SERVICES AND CERTIFICATION OF ENTERPRISES**



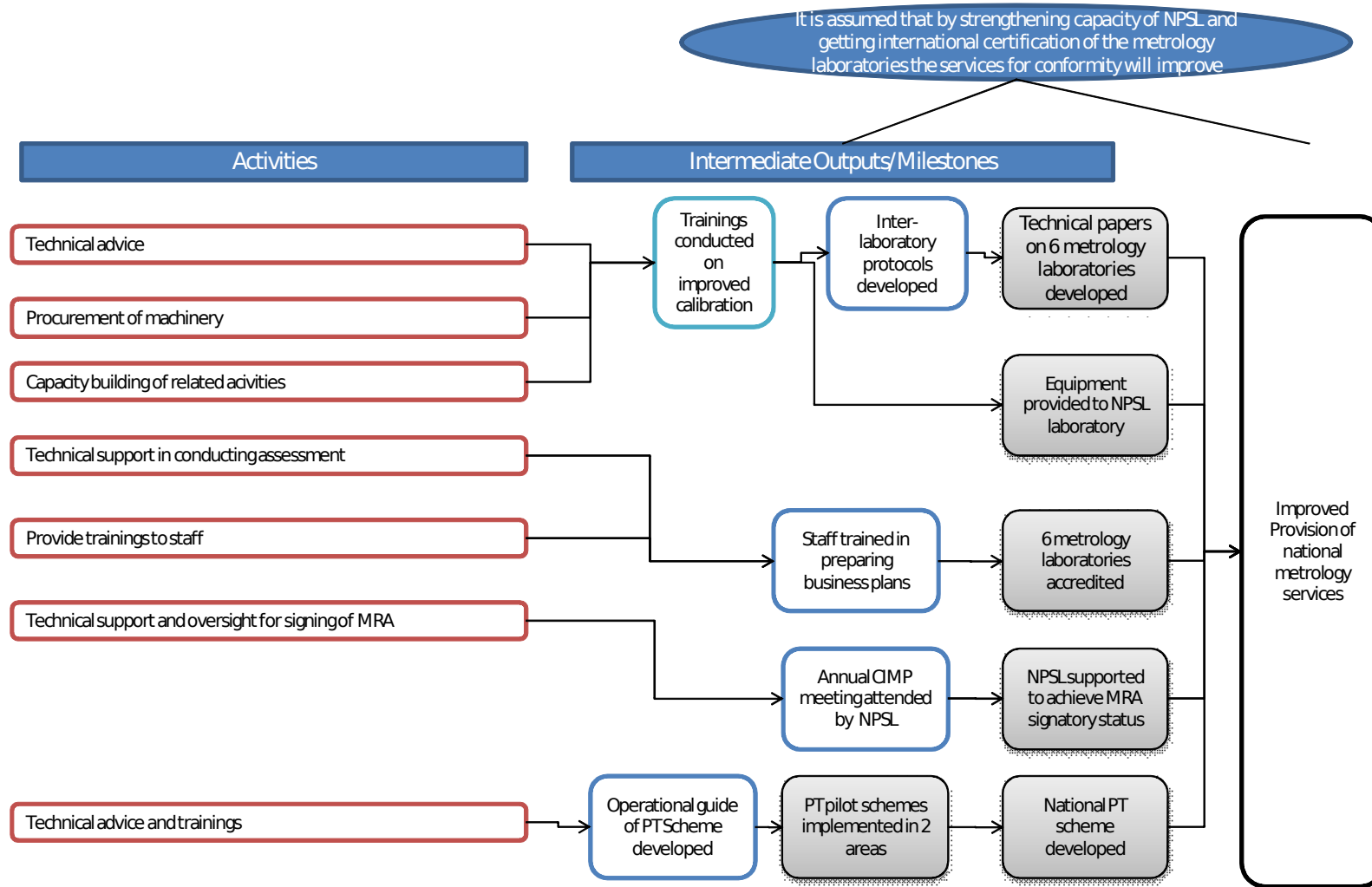
**FIGURE 4-23: OUTPUT MAP FOR COMPONENT 2.2.6: DEVELOPMENT OF BUSINESS ARRANGEMENTS ALONG GLOBAL SUPPLY CHAIN**



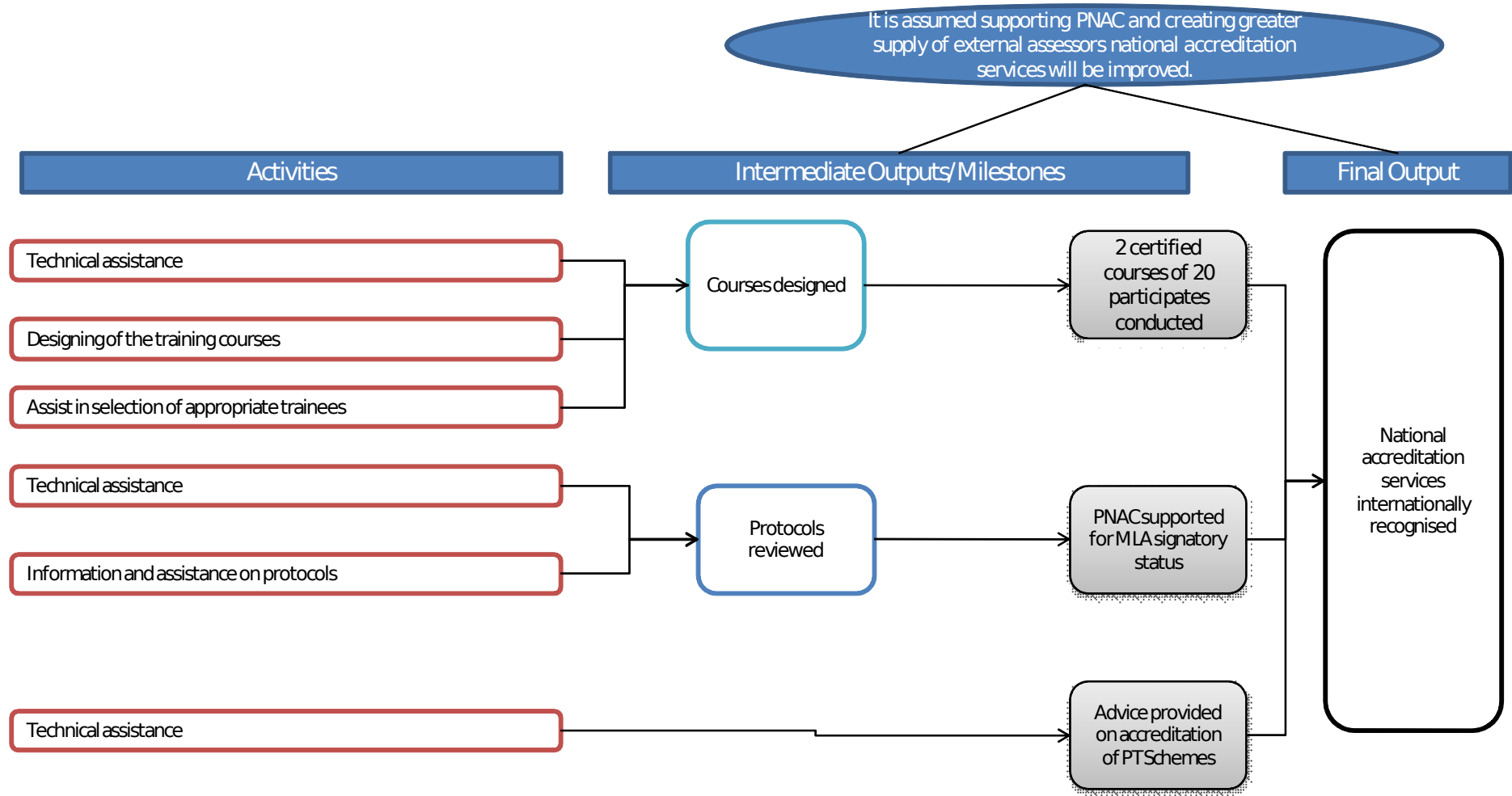
**FIGURE 4-24: OUTPUTMAP FOR COMPONENT 2.3.1: IMPROVED STANDARDIZATION AND TECHNICAL REGULATION PRACTICES**



**FIGURE 4-25: OUTPUTMAP FOR COMPONENT 2.3.2: TRACEABLE NATIONAL METROLOGY SERVICES**

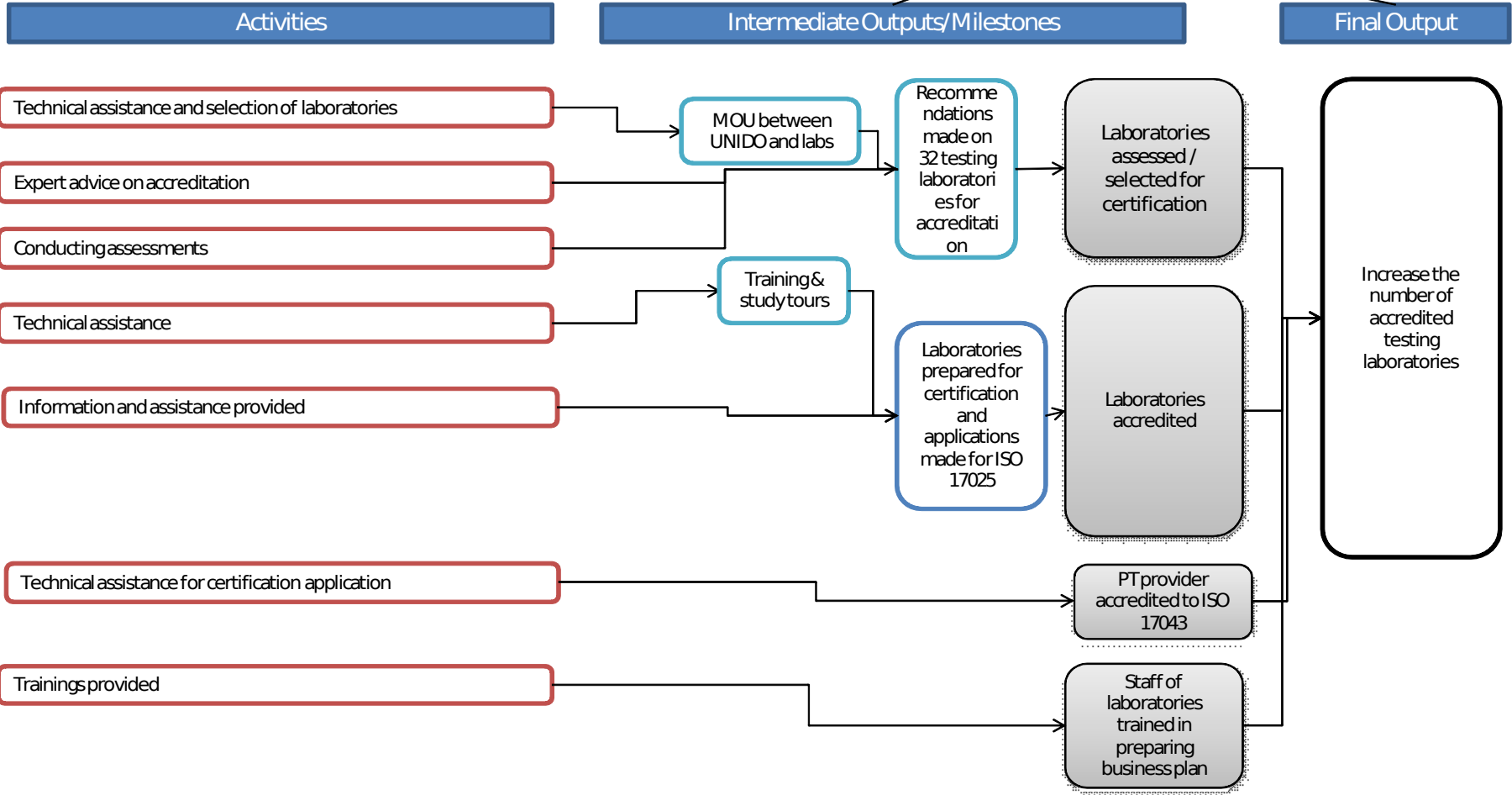


**FIGURE 4-26: OUTPUTMAP FOR COMPONENT 2.3.3: INTERNATIONALLY RECOGNISED NATIONAL ACCREDITATION SERVICES**



**FIGURE 4-27: OUTPUTMAP FOR COMPONENT 2.3.4: ACCREDITED TESTING LABORATORIES**

It is assumed supporting building capacity of staff to better manage and develop business plans and to assist laboratories in getting accreditation will improve laboratory infrastructure



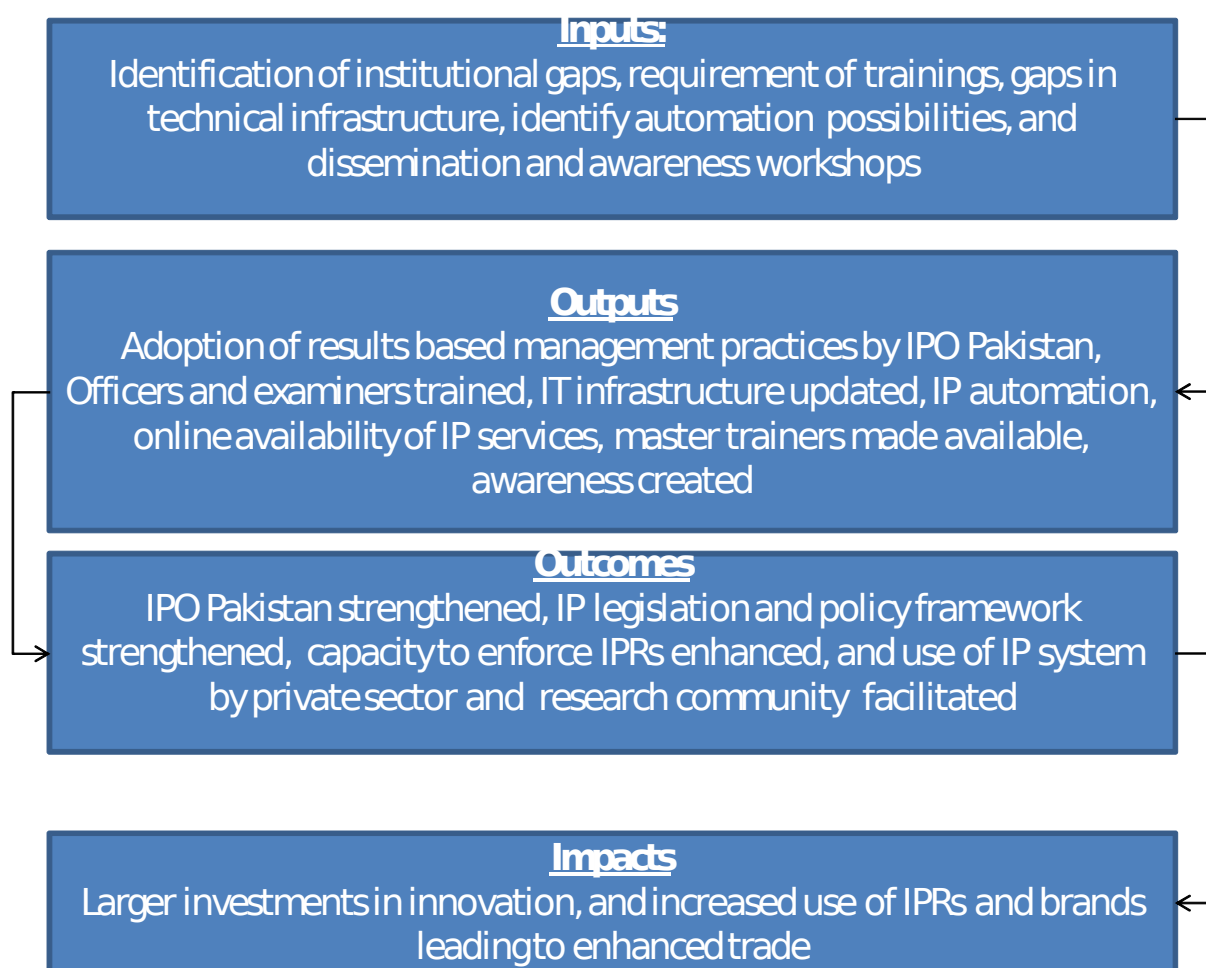




## 4 MONITORING FRAMEWORK FOR COMPONENT 3 OF TRTA II

An effective IP system is a prerequisite for promoting trade, transferring technology, and attracting investments, especially in innovative and knowledge based industries. The TRTA II, in its third component, will work with IPO-Pakistan, and other stakeholders, to build the capacity of IP institutions, and establish systems that will facilitate the use of IP for the achievement of overall economic goals . The broad spectrum of the intervention is provided below:

**FIGURE 5-28: BROAD PROGRAMME DESIGN FOR COMPONENT 3 OF TRAT II**

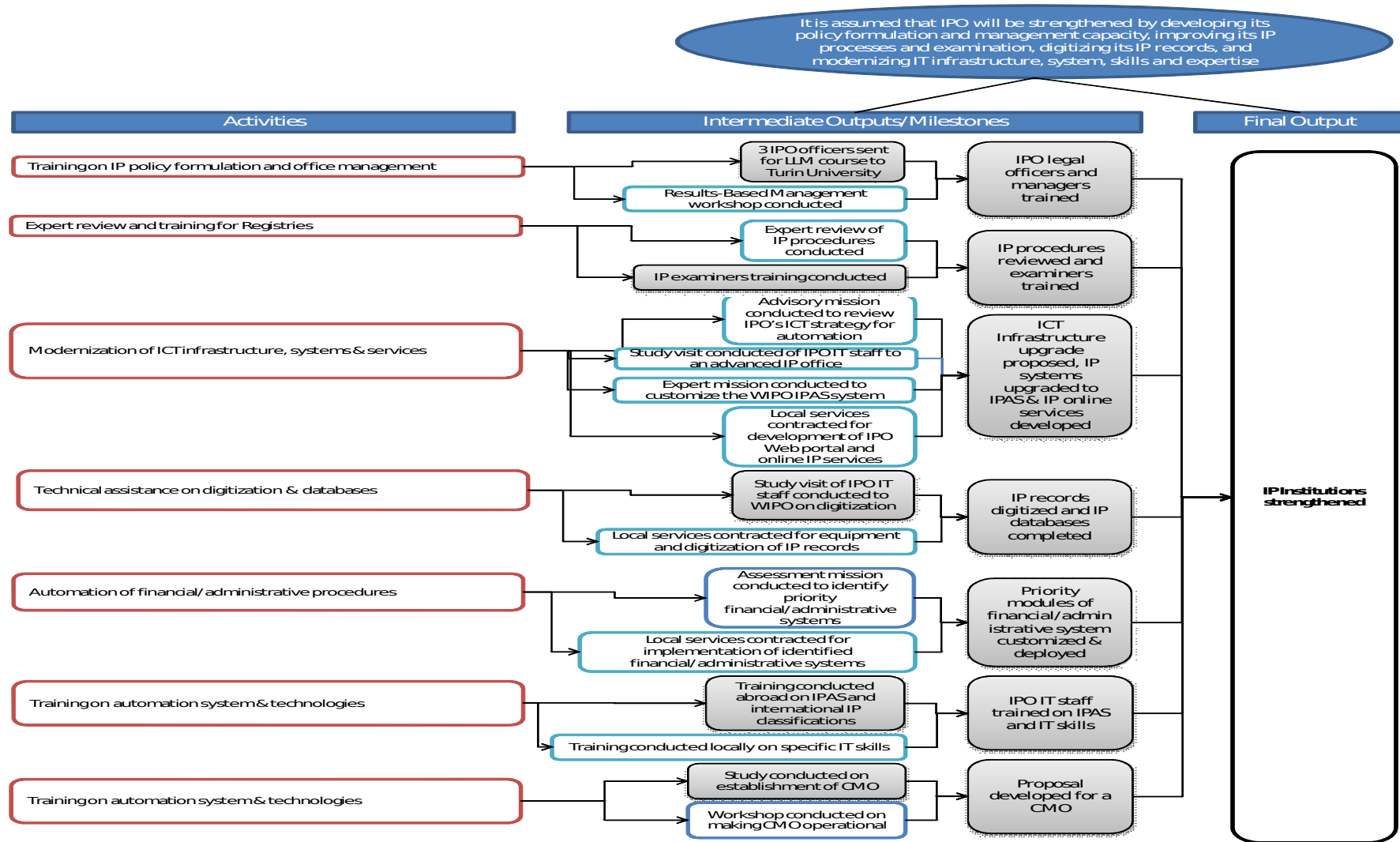


### 4.1 OUTPUT MAPS FOR COMPONENT 3

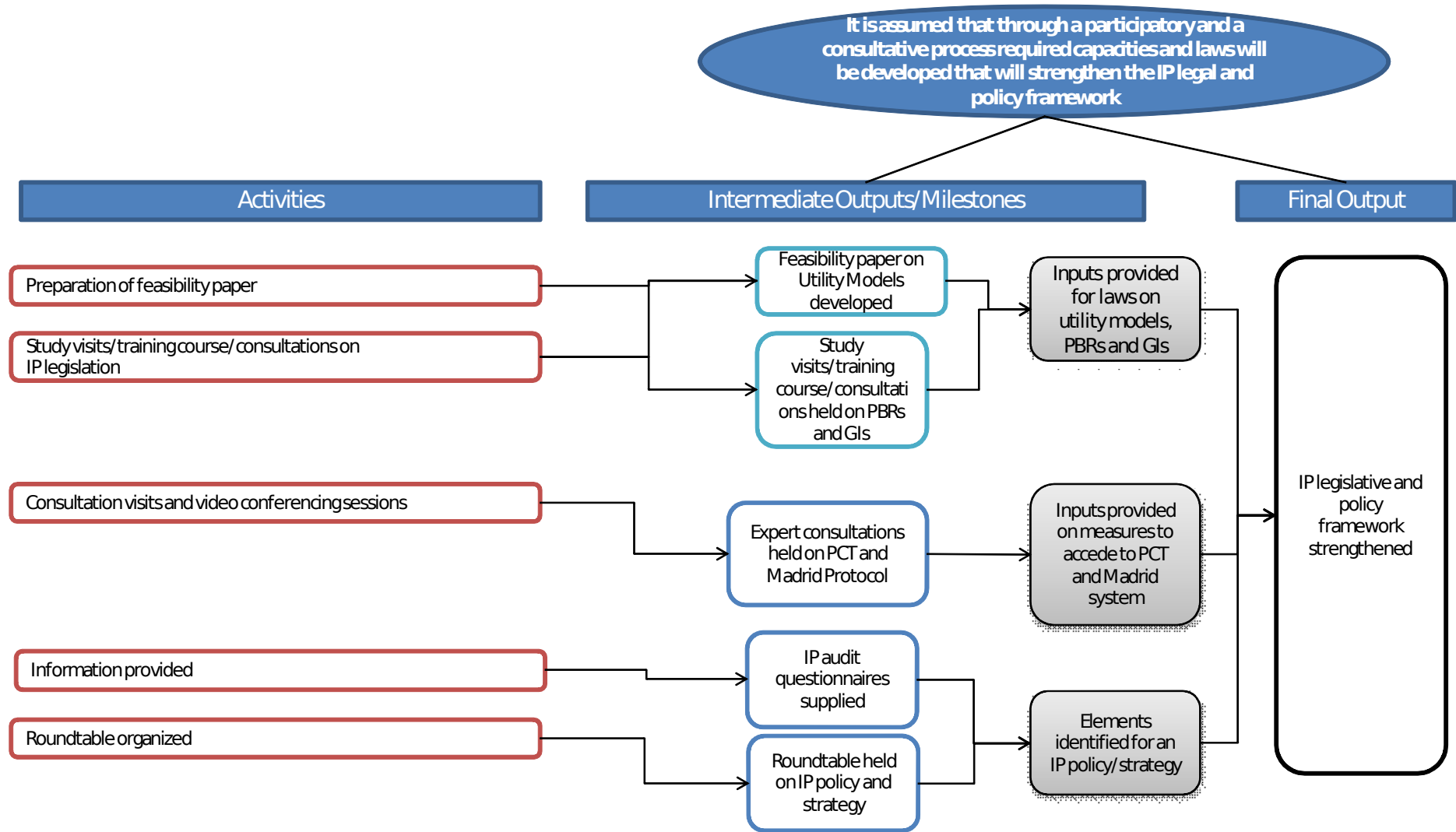
Below we have produced output maps for each of the sub-components of the Strengthening IPR System interventions being implemented by WIPO.

The grey boxes in the output maps provide critical outputs. Most of these outputs are related to programme level impacts. The monitoring matrix will focus on achieving compliance with these critical outputs. We have also provided intermediate outputs to determine the performance relative to the final output.

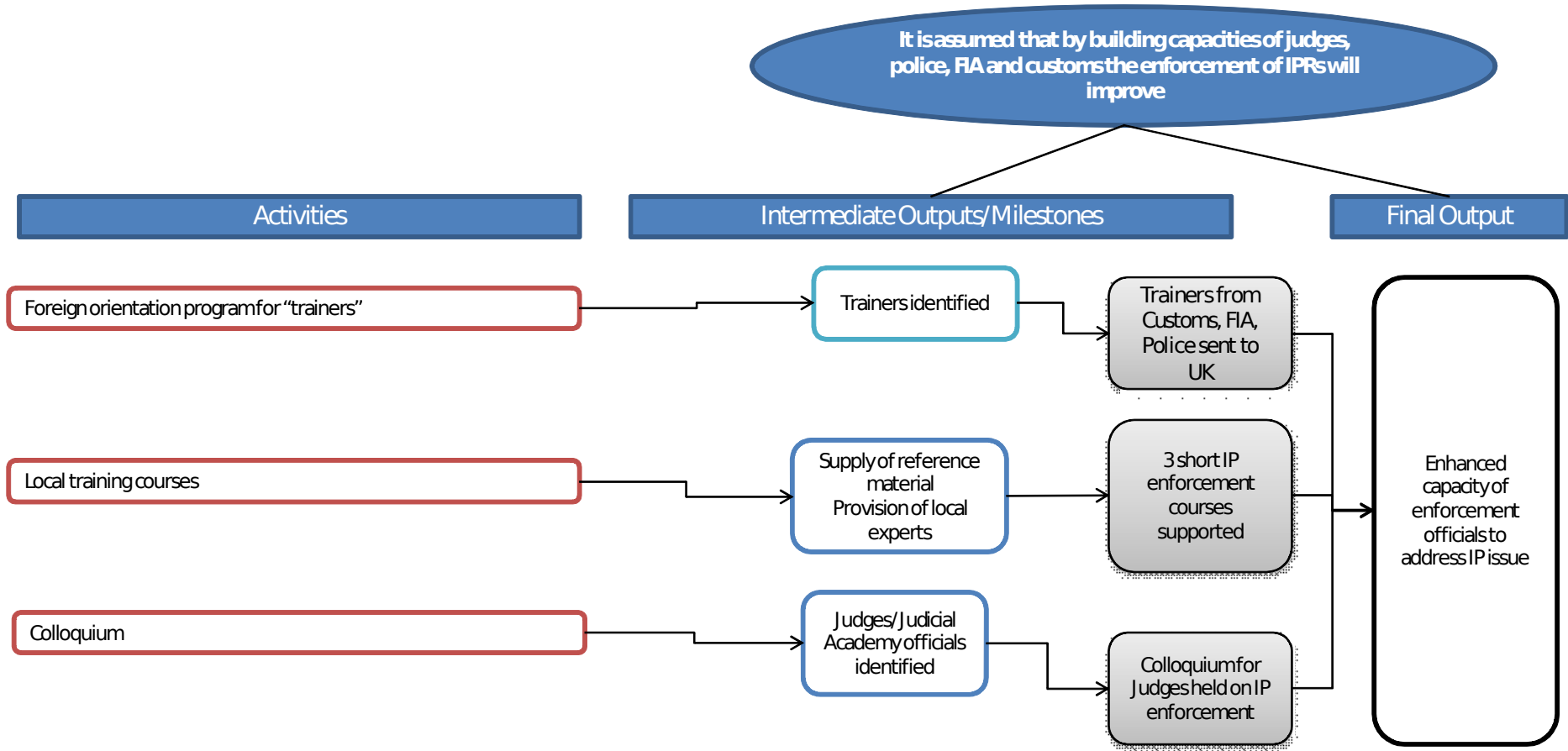
**FIGURE 5-29: OUTPUTMAP FOR COMPONENT 3.1.1: STRENGTHENED IP INSTITUTIONS**



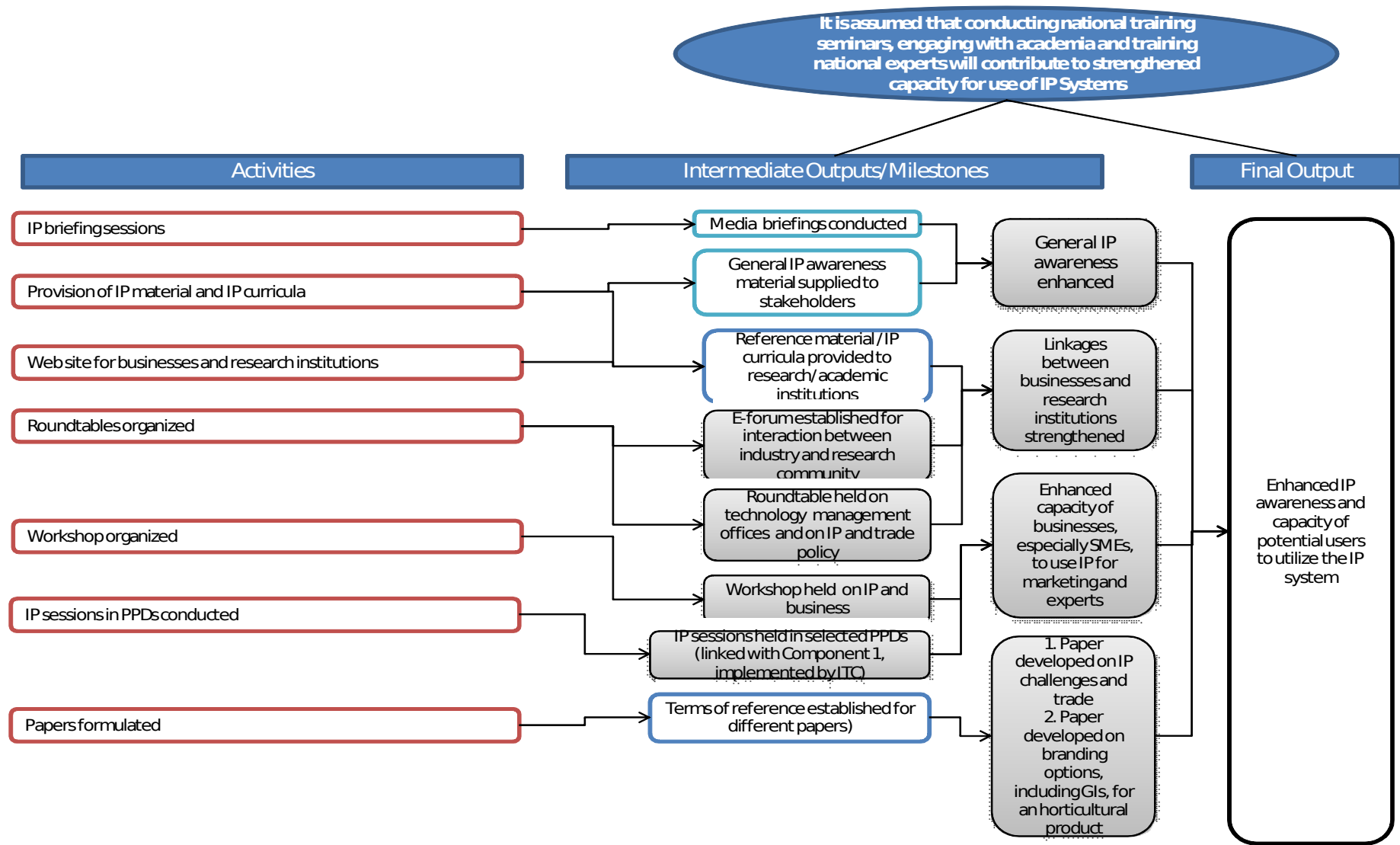
**FIGURE 5-30: OUTPUTMAP FOR COMPONENT 3.2: STRENGTHENED IP LEGISLATIVE & POLICY FRAMEWORK**



**FIGURE 5-31: OUTPUTMAP FOR COMPONENT 3.3: INCREASED CAPACITY FOR ENFORCEMENT OF IPRS**



**FIGURE 5-32: OUTPUTMAP FOR COMPONENT 3.4: ENHANCED CAPACITY OF BUSINESSES & RESEARCH INSTITUTIONS TO USE IP SYSTEM**



## 5 CONCLUSION

This guide is written to facilitate the monitoring of the key outputs that will be produced under the TRTA II programme. It is written in such a way that it will provide a logical linkage to the evaluation and impact assessment part. The output maps provide a simple lay out where each of the output is such that it is connected to an impact. The development of output map has also facilitated the construction of monitoring matrix. It is assumed that the if the progarmme is able to achieve the outputs provided in grey boxes of the Output maps then the progarmme will contribute towards its purposes under the set of assumptions defined in the programme inception report.

It is also assumed that the person conducting monitoring based on the proposed framework is provided information from all the concerned stakeholders in a timely manner. The information should include detailed, TORs of experts, detailed work plans and budget plans. All of this information will be required to track the performance towards an output that has been highlighted in the output map.

It is also essential that the person monitoring the performance is provided some autonomy to independently judge performance and also make unbiased recommendation where he/she feels that a correction / action is required.

Finally, this monitoring will be closely supported by an impact evaluation framework that will be developed by UNIDO separately.