The Industrial Country Diagnostics methodology for the Program Country Partnership (PCP)

1. Conceptual framework

Objective: To help the PCP country's relevant ministry staff, the UNIDO PCP Programme Manager and the members of UNIDO's Programming Team to acquire a shared understanding of the strategic direction the country needs to take and of the major constraints that must be addressed in the targeted industries to advance inclusive and sustainable industrial development through the PCP.

Based on the country's level of development, the development goals and industrialization strategy elaborated in the country's PCP request document, the diagnostics study supports the country in achieving broader development goals. The strategic direction and analyses provide a foundation to align the objectives of various TC projects to be developed and help formulate a coherent PCP programme that maximizes the prospects for overcoming any binding constraints, and unleashes the country's industrial development potential to achieve national and international development goals.

The key messages that emerge from these analyses shape the storyline, structure and presentation of findings in the diagnostics report. Based on the diagnostics study, policymakers and UNIDO will not only gain more insights into the country's industrial development conditions, but will also provide a better understanding of the areas and issues that require action to drive the respective country towards a path of industrial development associated with stronger growth and better living and environmental standards for all.

The methodology presented in this document is fully aligned with the key principles of PCP:

1) National ownership, as the PCP follows country priorities mentioned in national policy documents
2) Focus on priority industrial sectors and areas
3) Facilitation of public and private investment by identifying key bottlenecks to business growth
4) Multi-stakeholder partnerships based on consultations with the stakeholders and the collection of information through surveys are also part of the diagnostics process.

The diagnostics study covers four practical questions underlying the PCP's strategic design:

1) Among all of the country's priorities, how can the field be narrowed down to identify the areas of intervention suitable for the PCP?

2) How should these interventions be embedded in the PCP country's national environment?
3) What is the baseline for evaluating the PCP impacts?
4) How to create an agreed common starting point for collaboration between UNIDO, the government and all other relevant stakeholders?

2. Main strategic pillars

Developing countries usually face multiple gaps, bottlenecks and long delays in the industrialization process. The PCP programme necessarily needs to "*prioritize the priorities*" because it cannot—based on previous experiences—mobilize resources to address all of the country's needs. The PCP must focus on the "low hanging fruits" that have the highest possibility of being replicated on a larger scale. As highlighted in the independent mid-term evaluation of UNIDO PCPs, "[t]here are several implementation challenges: in some instances, government capacities to implement specific large-scale projects and mobilize the necessary large-scale funding and UNIDO's organizational set up" (p. VII).

The priorities' priorities are selected on the basis of two main pillars:

a) **Thematic areas** represent the country's most urgent needs in terms of possible areas of intervention. Thematic areas can be further expressed as "**thematic components**" on different sub-themes. Just as an example, the thematic area "value addition" can represent a country's desire to climb the ladder of development through industrialization. The identification of components such as the "promotion of investments for diversification" or "sustainable production" are useful to gain more insights in how the country intends to intervene in a given thematic area. Thematic areas and/or thematic components need to be solidly embedded in and aligned with the national policy context and represents the main components of the diagnostics study. In Figure 1, thematic areas 1 and 2 are assumed to be consistent with hypothetical PCP country policy pillars 1 and 2 from national policy documents, and are represented by the same colour.

b) **Priority manufacturing sectors** are selected and expressed by the standard ISIC (International Standards Classification) at the 2-digit level (ISIC sectors rev. 3 15 – 37). In some circumstances, the boundary can be extended to the entire industry (ISIC rev. 3 10 – 45). Examples of the level of aggregation required for the exercise are "Food" (ISIC rev. 3 15) and Basic Metals (ISIC Rev. 3 27). On the basis of the PCP country's needs, the analysis can be customized to select other industries at a more disaggregated level (e.g. dairy products for "Food" or iron and steel for "Basic Metals").

Thematic areas (and **components**) and **manufacturing priority sectors** (and/or priority **sub-sectors**) represent the strategic boundary of action of the PCP.

The analysis is supplemented by a study of the **bottlenecks to business growth** and the identification of **vulnerable firms**. Bottlenecks to business growth or vulnerable firms are not "selected" per se, as the complexity of such problems requires policymakers and project managers to take the broader picture of the industrial context into account. The identification of bottlenecks to business growth and vulnerable manufacturing firms provides useful information that can guide project design towards problems or actors that deserve special attention. One example of a bottleneck can, for example, be that firms face severe

barriers to access to finance. One category of vulnerable firms facing a bottleneck could, for example, be small and medium enterprises (SMEs).

Figure 1. PCP diagnostics study's conceptual framework
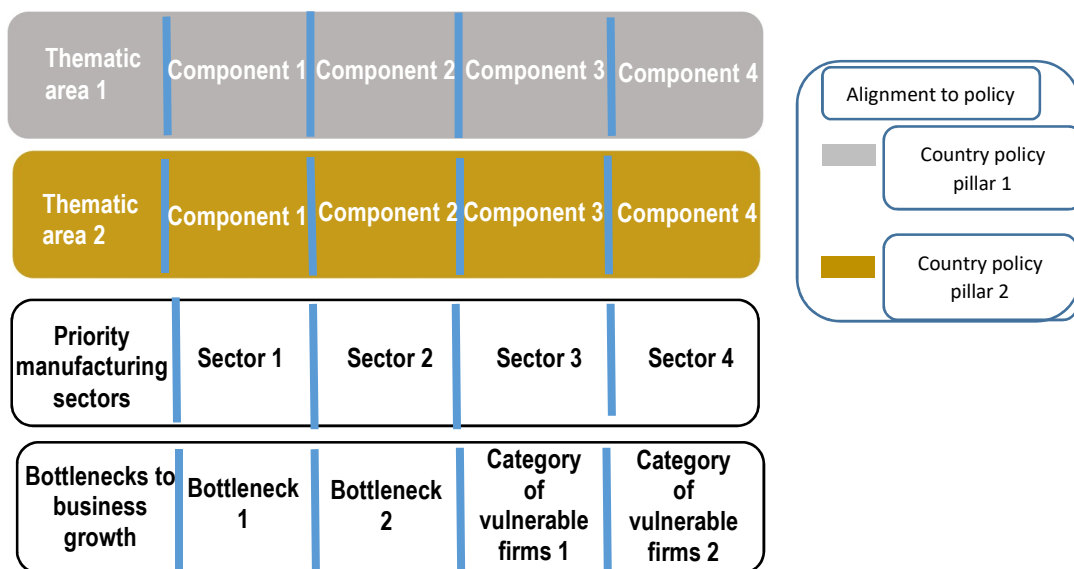
3. Structure of the report

The identification of thematic areas, priority manufacturing industries and bottlenecks is reflected in specific chapters of the report. The report usually opens with the table of contents and an executive summary. The contents part of the report comprises four chapters.

Chapter 1 focusses on the country's state of industrial development and is based on information deriving from the use of indicators and the gaps analysis, consultations, a country's policy and strategy documents, CCA and UNSDF. It presents the country's position in terms of inclusive and sustainable industrial development. The identification of gaps shifts the analysis towards identification of thematic areas and components. The analyses shed light on whether these areas of intervention are aligned with the national policy's strategic objectives.

The diagnostics study sometimes commences after certain thematic areas or components are agreed on during the pre-diagnostics dialogue between UNIDO and the respective government. In such cases, diagnostics studies are useful a1) to analyse and eventually validate the agreed thematic areas based on data; a2) to identify the scope of the necessary intervention or the direction of the intervention for the agreed thematic areas; a3) to further analyse the national context by identifying other thematic areas or more detailed thematic components.

Table 1. Possible approaches to the thematic areas chapter (Chapter 1)

Thematic areas are already selected before the PCP diagnostics study is carried out	Thematic areas are not selected by the country before the PCP diagnostics study is carried out
a1) Analyse and eventually validate the agreed thematic areas based on data a2) Identify the scope of the necessary intervention or the direction of the intervention for the agreed thematic areas a3) Further analyse the national context by identifying other thematic areas or more detailed components.	Selection of thematic areas based on the most severe gaps, consultations, perceptions, array of UNIDO services and priorities emerging from policy documents.

Chapter 2 analyses the policy context. It focusses on the country's performance in terms of governance and policy-making capabilities. It provides useful background information about all of the diagnostics study's pillars. It explores the extent to which industrial policy needs to be a thematic area of the PCP. It provides useful information on the country's approach to diagnosing priority industries. This information, in turn, is useful for setting the tone of the priority industries analysis. Chapter 2 also examines the effectiveness of the government to tackle issues that are of relevance for the bottlenecks to business growth analysis.

Figure 2. Links between the diagnostics study's conceptual framework and the structure of the report
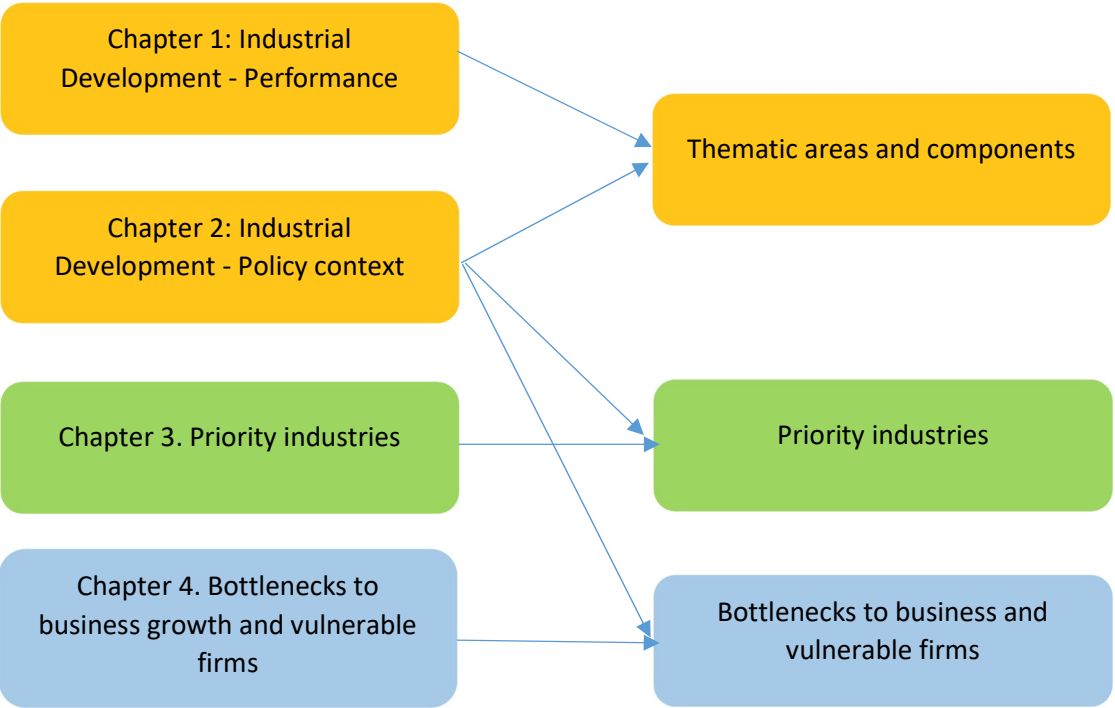
Chapter 3 aims to identify priority industries using ad hoc UNIDO branded research techniques. Countries have sometimes already made their strategic choice in terms of priority industries. In such cases, the approach is to analyse these sectors' performance and potential on the basis of different UNIDO criteria

and/or (based on data availability) to propose industries at a more disaggregated level, which the government may not have chosen as being a strategic one. When priority manufacturing industries have not yet been selected by the PCP country, UNIDO's role is to facilitate selection based on research findings. In such cases, UNIDO's role is 1) to provide sound technical support for each selection criterion to distinguish the best performing industries according to reliable and fresh empirical evidence; 2) and/or to collaborate with the country focal points and stakeholders to select specific industries taking solid technical considerations and the government's preferences towards the different criteria into account.

Ideally, the number of thematic components and priority industries should match the number of UNIDO PCP project managers so each project manager can concentrate on one specific thematic component and one priority manufacturing industry. From a practical point of view, there is no specific rule on the number of priority industries at the 2- and 4-digit level of ISIC that need to be selected. As a rule of thumb, when the technical selection process or the national policy documents result in a number of priority manufacturing industries that is higher than the number of UNIDO PCP project managers associated with a given number of thematic components, the final selection of priority manufacturing industries is made at the operational level during the PCP formulation dialogue rather than at the strategic level with the diagnostics study.

Table 2. Possible approaches to the priority industries chapter

Priority industries have already been selected by the PCP country	Priority industries have not yet been selected by the PCP country
a) Analyse the performance and potential of each of the priority industries selected by the PCP country government on the basis of different criteria (trade, value added, employment) and on data availability b) Propose a matrix of potential priority manufacturing sub-sectors for each of the manufacturing industries selected by the PCP country	Selection of the best performing industries (at the ISIC 2-digit level) on the basis of different selection criteria and on data availability (trade, value added and employment) and by taking the government's preferences towards each of the selection criteria into account

Chapter 4 provides insights into private sector needs and the day-to-day problems they face. This section of the report needs to be developed in consultation with the private sector. Findings from international and UNIDO surveys on firms need to be validated, further elaborated and discussed with relevant actors in the field (e.g. Chamber of Commerce, business associations).

4. Sources and approaches to identifying the main strategic pillars

If thematic areas/components, priority industries and bottlenecks to business growth are the strategic ingredients to formulate a PCP, the methodologies for their selection must be analysed as well. Different sources are useful to determine the necessary strategic elements of the PCP.

Table 3. Sources of information and methods for the selection of thematic areas, priority manufacturing industries and bottlenecks to business growth

Pillars of the analysis	Sources and methods for identification
Thematic areas and thematic components	a) Gaps analysis (policy documents or comparators) b) Consultations with key stakeholders c) Match with UNIDO services d) Policy documents and UN documents e) Reports and other literature review sources
Priority industries	a) Research methodologies for prioritization b) Priority industries identified in national strategy documents c) Reports and other literature review sources
Bottlenecks and vulnerable firms	a) International surveys, UNIDO surveys or national surveys b) Reports and other literature review sources

Research and data analyses are not the only source of information that can be used to identify thematic areas and components. They usually focus specifically on the respective country's gaps and shortcomings either in terms of a national policy target or compared to a set of comparator countries. A gaps analysis is typically the analytical tool used to identify thematic areas and components. Their selection may also depend on pragmatic considerations such as:

1) The match with UNIDO services. The industrial diagnostics study aims at facilitating the match between the country's needs and the services UNIDO can provide. Thematic areas and components need to be selected based on the services UNIDO can offer to address the country's requirements. For example, the health system is often a priority sector in developing countries, but an industrial diagnostics study primarily focuses on industrial issues. (Focus on thematic areas).
2) Consultations. It is crucial that the thematic areas and components fully represent the stakeholders' perceived urgency of action. (Multi-stakeholder partnership)
3) Policy documents. Thematic areas and components are often already explicitly mentioned in policy documents in terms of pillars and strategic direction. In such cases, they may represent a solid foundation based on which PCP focus areas and components can be identified. (Country ownership).

The identification of priority manufacturing industries is indispensable to fully capture the focus on industrial priorities principles. This section is mostly data-driven as research techniques are applied to assess the performance of different industries and select those with the highest potential. This section

also takes into account the country ownership principle in that the priority industries that have already been selected by the government and are included in official policy documents are not questioned, but it discusses the performance of the selected priority industries on the basis of quantitative and qualitative techniques and/or proposes sub-sectors at a higher level of disaggregation for each of the selected industries.

The identification of bottlenecks to business growth is crucial for informing the PCP project design and for promoting the practical application of the public/private investment environment facilitation principle.

5. Methodology

The report is an agile and flexible document that focusses on the general picture of the country from different dimensions of analysis from the macro perspective, covering the country's overall situation and from the micro perspective, covering the specific problems manufacturing firms face.

Figure 3. Methodological approach for the elaboration of the different chapters
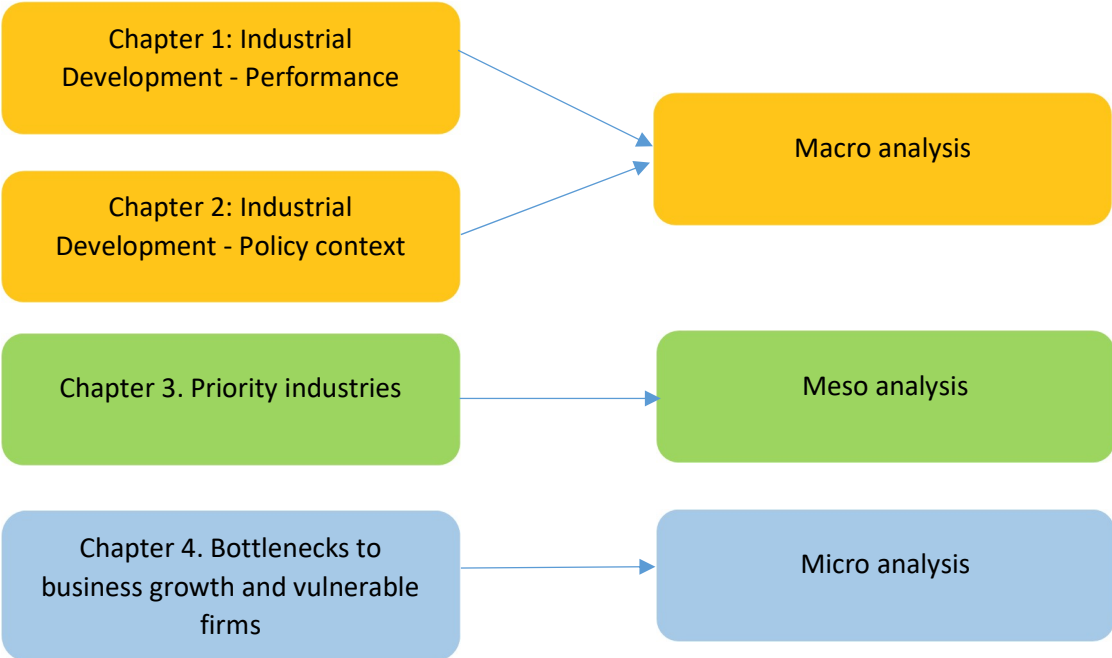
Chapter 1 of the diagnostics study addresses the macro context, dealing with the national economic system and the role of industry. It focusses on the economic, social and environmental dimensions.

The selection of the relevant indicators depends on the following criteria:

1) Internationally recognized indicators relevant for industrial development (e.g. SDGs)
2) UNIDO methodologies (e.g. Country and Industry Profile by Field Offices)
3) Indicators from national policy documents

4) Indicators related to the pre-diagnostics selection of certain thematic areas (e.g. a pre-diagnostics interest towards a specific thematic area may suggest a focus on certain indicators related to that area).
5) Indicators of interest for the stakeholders.

For each of these indicators, a comparison between the PCP country's performance and the national targets contained in policy documents and/or the performance of comparator countries (e.g. countries belonging to a certain category of income or to a certain geographical area) helps the analyst understand the countries' strengths and weaknesses and to identify thematic areas and components. The data analysis is tested and further supplemented with information collected from stakeholders during consultations.

Figure 4. Structure of Chapter 1

Macro-level Analysis: **Industrial Performance**

| Economic | Social | Environmental |

Chapter 2 analyses the policy context. The analysis is based on the use of internationally recognized indicators expressing capabilities in policy-making, on interviews with relevant stakeholders (ministries, private sector) and online sources providing useful supplementary information about policy coordination and effectiveness.

Figure 5. Structure of Chapter 2

Policy Context

| Policy-making capabilities | Industrial Policy-making process |

Chapter 3 covers the meso dimension focussing on the performance of individual industrial sectors at different levels of aggregation. Different criteria and techniques are analysed on the basis of data availability. The three main areas of analysis in Chapter 3 are:

1) Capabilities
2) Market
3) Employment.

In terms of capabilities, indicators such as revealed comparative advantage reflect the extent of the country's success in exporting certain products, revealing the level of its capability to produce goods in those specific industries. Another technique that can be adopted is an analysis of the latent potential to complement the revealed comparative advantage approach. It is based on the analysis of the country's performance in terms of value added compared to the average performance of similar countries (in terms of income level or resource endowments). Whereas the revealed comparative advantage approach flags

the extent of the country's success in certain industries, the latent comparative advantage highlights those industries with untapped potential.

The two criteria normally used for the market analysis are dynamism, i.e. the extent demand for products from specific industries has grown internationally, and the imports substitution potential expressed by the size of national imports representing a proxy of national consumption. The two dimensions reflect considerations about international and domestic demand opportunities that could be further developed in certain industries.

The employment potential (expressed in either absolute terms or as employment intensity representing employment per unit of value added) is another crucial criterion for developing countries, where the unemployment rate is often very high.

Figure 6. Structure of Chapter 3

Chapter 4 builds on data of firms derived from international organizations. One of the most widely used datasets is the World Bank Enterprise Survey published by the World Bank. The World Bank surveys are published every 5 to 10 years, hence, if possible, it may be necessary for UNIDO to conduct its own online survey of the private sector in collaboration with the local UNIDO UR and the local institutions, such as the Chamber of Commerce. The firms level analysis is based on firms' perceptions of the severity of certain bottlenecks and the policy context or includes data on firms' economic performance and their particular characteristics. The analysis is useful for identifying those bottlenecks to business growth that are usually perceived as business promotion problems and for identifying firms that are affected the most by those bottlenecks. When survey questions are based on the perceptions of firms, the findings are cross-checked with the relevant stakeholders' opinions to verify that the desk-based findings and reality are well aligned.

Figure 7. Structure of Chapter 4

# 6. Final output of the diagnostics study

A well conducted diagnostics study, after Chapters 1 to 4 have been developed, contains all the necessary ingredients to delineate the strategic pillars of the PCP. All of the strategic PCP information must be illustrated in a very user friendly setting to highlight the strategic direction of the interventions. The

findings of the diagnostics study can be summarized in accordance with the diagram in Figure 8. The final output of the diagnostics study must contain:

1) Thematic areas and components that are seamlessly aligned with national policy pillars. As an example in Figure 8, the thematic components 1 and 2 of thematic area 1 are assumed to be aligned with the hypothetical PCP country's policy pillars 1 and 2.
2) Priority manufacturing industries (which can be expressed at the 2-digit ISIC level or, if agreed and necessary, at a higher level of disaggregation)
3) Key bottlenecks and/or an indication of the profile of vulnerable firms in the country.

Past experiences show that industrial policy is frequently selected as a key area of intervention, and is often considered a "special" thematic area due to its strong influence on all other thematic areas.

Figure 8. Final output of diagnostics study: the PCP strategic map
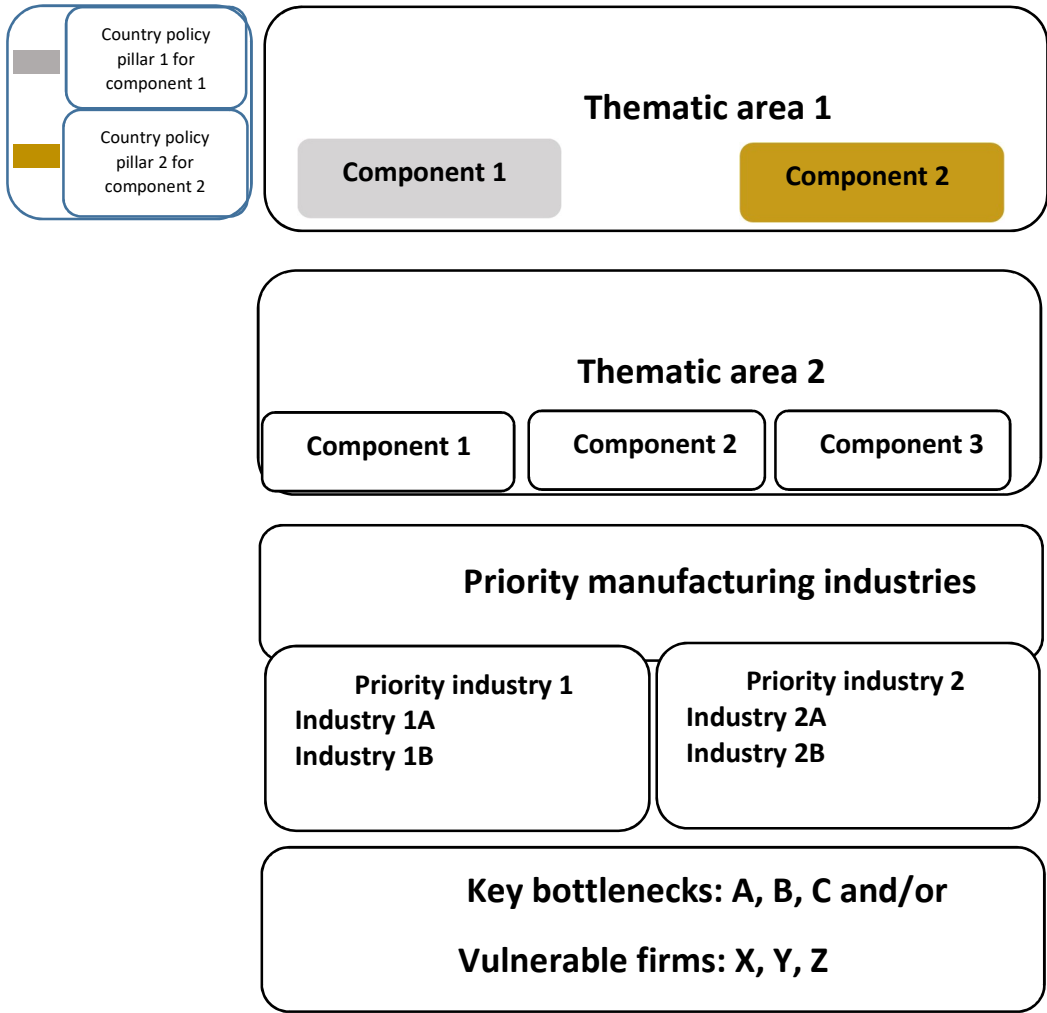
The PCP diagnostics study represents the foundation for the formulation of the PCP programme document. It usually reflects Chapter 1 and the foundation of the PCP programme document as it describes the rationale for the PCP strategic directions.

Once the final matrix of the PCP diagnostics study has been completed, the PCP programme manager should use the final PCP diagnostics matrix to elaborate the PCP programme document on the basis of the theory of change by identifying specific activities – output – outcome – impact. The thematic areas of block 1 do not all necessarily have to be impacts or activities, as their nature depends on the dialogue developed with the counterpart. The PCP diagnostics study is, however, crucial to further develop the PCP programme document because: 1) it proposes the key indicators (especially in block 1) needed for the construction of a baseline for the PCP impacts, SDGs or national policy indicators; 2) it is the tool for the selection of thematic areas and priority industries that are needed to nominate the UNIDO and PCP government focal points to initiate the dialogue on identification of specific interventions.