(DRAFT) NOTE ON SECONDARY RESEARCH
Diagnostic Country Report (DCR)

1. Introduction

> ___Project Goal___*: To better demonstrate measurable benefits from an effective competition reforms process in developing countries, for ensuring greater attention to competition issues*

1.1 As a first output of the CREW project, **Diagnostic Country Reports (DCRs)** will be developed for each of the four CREW project countries (Ghana, India, The Philippines and Zambia). The purpose of the DCR is to help partners and country-level stakeholders better understand elements of competition reforms in each of the two selected markets (***bus transport and staple food***). The DCR will also help develop a basic understanding about how competition reforms in each sector have impacted (or could impact) consumers and producers – and be used as an instrument to engage with policymakers and scholars to initiate greater attention on competition reforms.

1.2 Towards this end, and on the basis of inputs received from the country partners, an **Analytical Matrix[1]** was developed by the CREW project team. The purpose of this matrix is to guide country partners through the process of developing the country-specific DCRs.

1.3 This analytical matrix contains:
(i)   Selected country-specific competition enhancing *reforms* in each of the two **markets** (3 to 4 reforms per country per sector) undertaken as part of the market reforms process;
(ii)   Country-specific *reforms* that could be better linked with benefits to consumers and producers;
(iii)   A set of specific ***indicators[2]***, which will be used to assess the benefits of these reforms on consumers and on producers. Data will be gathered on each of these indicators (through primary and secondary means) and analysed, to develop the DCR.

1.4 The above-mentioned matrix will be used as a reference by the country partners in developing the DCR, which will include gathering and analysing both secondary and primary data from the two markets. This analysis will assess the nature and degree of benefits to consumers and producers resulting from the above-mentioned market related reforms. This exercise is therefore extremely crucial for the CREW project, going forward.

1.5 Members of the CREW Project Advisory Committee (PAC) suggested that the country partners should initiate the research by undertaking secondary data collection first. This will help them assess what type, frequency and quality of data (for each of the selected indicators) are available in each country – and how best that data can be used in line with the objective of the DCR. It is therefore suggested to all the partners to share with the CREW project

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[1]Country Partners/Researchers are advised to read the *CREW Analytical Matrix* (http://www.cuts-ccier.org/CREW/Diagnostic_Phase.htm) together with this note, for better comprehension.
[2] Indicators = Consumer welfare indicators (e.g., Access, Price and Quality) AND Producer welfare indicators (e.g., Entry, Investment and Growth)

implementation team data that is available (for both the sectors) related to each **quantitative variable** provided in the tables below. Once there is clarity about the nature and extent of data availability for these indicators, it will be easier for the country partners to plan their approach to analysing this data (with advice from the CUTS Implementation Team) and undertaking primary research. Of course, it needs to be mentioned here that in some of the countries, secondary data might not be easily available in the public domain, so meetings and discussions with key stakeholders/institutions would be necessary to obtain such data.

1.6 This note presents a general guideline (derived from the analytical matrix) to help the country partners identify and gather secondary data related to the various *indicators* listed in the analytical matrix. It is segregated into two sections, each dealing with one of the two markets. Please note that for every qualitative and quantitative variable listed in the table below, the corresponding indicator is provided inside parenthesis.

2. Staple Food Market

[N.B.: The purpose of this note is to provide general guidance to CREW country partners/researchers for undertaking the secondary work. Country partners/researchers should supplement the suggestions on variables below with their own, based on the ground realities in each country. While undertaking the secondary research the country partners/researchers should never lose sight of the goal of this project, stated at the beginning of this document]

2.1 As explained in the *analytical matrix*, the research in the staple food sector shall cover *reforms* in the entire supply chain comprising the following segments -*production, procurement, storage, and marketing & distribution*. In order to assist the process of secondary data collection, it is critical to understand how such data can be used to assess impact of selected *reforms* on consumers and producers. For each indicator and to the extent possible, data should be gathered for the period **before and after [3]each reform being examined**. Further, it is suggested that data is collected in the most disaggregated form. It is always possible to aggregate data from monthly to annual etc.

2.2 This section describes how quantitative and qualitative data related to the indicators could be used to assess benefits of market related reforms along the various segments of the staple food market supply chain.

❶**Production:** Reforms in the 'production' segment were mainly undertaken (across project countries) to help producers have easier, better, or lower cost access to inputs (fertiliser, seeds, credit, etc.). This would enable them to enhance their productivity as a means to getting better returns from their produce. The following data would be needed to undertake this assessment:

Quantitative Data	Qualitative Data
- Cost of inputs (fertiliser, seeds) *[Cost]* - Cost of subsidies *[Access and Cost]* - Percentage of the farming community	- Existence of schemes/ subsidies/ facilities available and their implementation process *[Access and Cost]*

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[3] Ideally, it would be useful to have data 5 years before and 5 years after a specific reform. However, in some case if reforms were undertaken 30 years ago, it might not be possible to find data so far back. In other situations, the reform is very recent so the after period is short (i.e., less than 5 years) - this is still ok, we can still look for immediate impact and forecast an ex-ante impact.

Quantitative Data	Qualitative Data
accessing credit *[Access and Cost]* - Total credit disbursed to farmers by the public sector and the private sector banks/financial institutions *[Access and Cost]* - Production/hectare data *[Growth]* - Area under cultivation for the specific crop (e.g. maize, rice, or wheat) *[Growth]* - Nature of farmers (% of small, medium, large) over the years *[Growth]*	- Modes of information dissemination about above schemes *[Access]* - Incentives to retain farmers (time based schemes) and their implementation process *[Growth]* - Changes in land tenure systems and effect on access to land *[Access]*

❷**Procurement**: Reforms in the procurement segment were mainly undertaken to help farmers get the support/base price (set by the government) for their produce, and in a timely manner. The following data would be needed to undertake this assessment:

Quantitative Data	Qualitative Data
- Volume procured by govt. vs private entities, *[Access]* - Seasonal procurement *[Access and Cost]* - Number of licenses/ renewals issued over the years to local buying agents (number of licenses denied) *[Entry]* - Base price for procurement (set by govt) over the years *[Price]* - Frequency of revision of base price *[Price]* - Wholesale market price over the years *[Price]* - Number of procuring entities *[Entry]*	- Existing procurement schemes (special attention to identifying 'incentives' provided by the State) *[Acess and Cost]* - Network of procuring entities (local buying agents) across the country*[Access and Cost]* - Process of obtaining license and registration for the local buying agents (time/ renewal/ fees) *[Entry]* - Types of licenses issued *[Entry]* - Nature of procuring entities *[Entry]* - Mode of payment to farmers by the procuring entities *[Access and Cost]*

❸**Storage**[4]: Some countries (India and Zambia) have witnessed reforms in the storage segment, aimed at improving availability of storage facilities for farmers and traders (irrespective of their size). For the other countries, where reforms in this segment have not been undertaken, partners are suggested to do a brief case study describing the storage segment (existing legal and regulatory framework, current market participants and their share) and highlight concerns faced by farmers/traders as a result of lack of reforms in this segment (in case of secondary research, information/report related to this segment should be captured and analysed). This would form a basis for some ex-ante estimation.

Quantitative Data	Qualitative Data
- Number of providers[5] (including types) *[Entry]* - Number of users over time *[Growth]* - Wastage of grains in storage facilities *[Growth]* - -Capacity (volume) of storage *[Growth,*	- Existence of schemes for warehousing *[Access]* - Existence of schemes to incentivise investment in warehousing (PPP[6]) *[Entry]*

[4] As per the feedback of country partners, storage is only applicable to **India and Zambia**
[5] Providers = providers of storage service & Users = users of storage service (farmers, traders)
[6] PPP = Public Private Partnerships (which is being used as a reform tool in the storage sub-market)

Investment]
- Percent of capacity utilization *[Growth]*

❹**Distribution and Marketing**[7]: For the consumer, reforms in this segment were aimed at providing benefits in terms of better access, reliable availability and cheaper prices of staple food. Further, the reforms were also expected to enable greater private participation (from a producer/distributor's perspective) in the distribution segment.

Producers (Distributor including Millers, etc.)		Consumers	
Quantitative Data	**Qualitative Data**	**Quantitative Data**	**Qualitative Data**
- Tariff rates over the years (in case of Philippines) *[Entry]* - Number of importers/licensed distributors over the years *[Entry, Growth]* - Number of licenses issued over the years *[Entry]* - Cost and time spent in obtaining licenses, over time *[Access and Cost]* - Number, Percentage of public and private players *[Entry]*	- Entry barriers for players (licensing/transparency/ fee) *[Entry]* - Process of obtaining licence and registration (time/ renewal/ fees) *[Entry]* - Types/ nature of licenses issued over the years *[Entry]*	- Retail price over the years *[Price]* - Seasonal price over the years *[Price]* - Monthly expenditure on selected staple food *[Price]* - Volume of selected staple food distributed through govt. channels *[Access]* - Volume of selected staple food privately sold (retail) *[Access]* - Amount of staple imported over the years *[Access]* - Import Price *[Price]* - Price of substitute foods *[Price]* - Volume sold of substitute foods *[Price]*	- Price stabilisation mechanism *[Price]* - Quality standards schemes *[Quality]* - Quality standard setting process *[Quality]* - Implementation of standardisation schemes *[Quality]* - Variety of (staple food) available *[Access]* - Elasticity of demand of staple food *[Price]* - Popular substitutes of the selected staple *[Access]* -

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[7] The reforms under 'Distribution and Marketing' affect producers as well as consumers. Hence two key questions have been framed affecting each individually. It is also important to mention that producers here includes intermediaries (like traders/ millers/ importers/ agents/ wholesalers, etc)

3. Bus Transport

[__N.B.__: The purpose of this note is to provide __general guidance__ to CREW country partners/researchers for undertaking the secondary work. Country partners/researchers should supplement the suggestions on variables below with their own, based on the ground realities in each country. While undertaking the secondary research the country partners/researchers should never lose sight of the goal of this project, stated at the beginning of this document.]

3.1 In the bus transport market, the DCRs will examine both *intra-city* and *inter-city* segments. Country partners/researchers need to bear this in mind while undertaking the secondary data collection and processing for the bus transport sector.

3.2 On the basis of the inputs received from the country partners/researchers, it is clear that the research needs to focus on three areas of reforms – (i) transport liberalisation policy, (ii) road traffic regulation and (iii) transport infrastructure reforms.

❶**Transport Liberalisation Policy**: From the producer (operator's) perspective, the objective of the liberalisation policy in the bus transport market is to ease entry of producers into the market by reducing the cost of acquiring buses – thereby creating inter-operator competition in each of the segments (*inter-city* and *intra-city*) mentioned above. From a consumer (passenger's) perspective, the objective of the liberalisation policy is to ensure reliable and easy availability of bus services at low price. The following data needs to be collected for this assessment.

Producer (Operator)		Consumer (Passenger)	
Quantitative Data	**Qualitative Data**	**Quantitative Data**	**Qualitative Data**
- Quantity of buses imported/acquired *[Entry]* - Cost of a bus (purchased locally and imported) *[Entry]* - Cost of licensing over time *[Entry]* - Cost of fuel over time *[Investment]* - Change in fares relative to change in costs (running cost + O&M costs) over the years *[Price/Cost]* - Number of players before and after the reform *[Entry]* - Total number of	- Investor Promotion / Protection Mechanism *[Investment]* - Schemes for private sector promotion / participation *[Entry]*	- Number of operators in both inter and intra city sectors (separately)*[Entry, Growth]* -Bus fare *[Price]* -Input costs—fuel, bus, licenses, etc *[Cost]* - Price of substitutes vis-à-vis bus fare -Price change vis-à-vis input cost change (fuel cost) *[Price/Cost]* - Number of routes per sector (inter and intra city) *[Access]* - Number of route-	- Route concentration mapping *[Access]* - Regulation to ensure good quality (including safe) vehicles are imported/ acquired *[Quality]* - Types of substitutes and their usage *[Access]* - Variety/categories[8] of buses available *[Access]* -Insight into Capacity and capacity utilization/overcrowding (if no quantitative data available) *[Quality, Growth]*

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[8] Variety (or categories) here pertains to different categories of bus services commonly available and differentiated in terms of size, comfort levels , capacity, speed, etc,

Producer (Operator)		Consumer (Passenger)	
Quantitative Data	Qualitative Data	Quantitative Data	Qualitative Data
new investors (including in infrastructure provision, bus manufacturing/ import, associated services, etc.) over the years *[Investment]* - Total investment (public and/or private) in the bus transport market over the years *[Investment]* -Change in number of operators over the years *[Growth]* -Total change in the number of passengers over the years *[Growth]* - Total revenue in the sector over the years *[Growth]*		types over time (classification based on quality, use, rural/urban/sub-urban, etc.) *[Access]* - Number of bus operators available for the provision of bus service (for each variety) *[Access]* -Number of, or percentage of, different categories of buses *[Quality]* -Capacity and capacity utilization *[Quality, Growth]* -Average age of buses in fleet *[Quality]*	

❷ Road Traffic Regulation

The main objective of this reform, from the operator's perspective, is to ensure ease of obtaining a license to operate and a fair and transparent process for setting fares. From the consumer's perspective, the main aim of this reform is to ensure that the price of bus transportation is regulated, routes are allocated according to the demand of the passengers and the quality of the service is at par with certain national standards.

Producer (Operator)		Consumer (Passenger)	
Quantitative Data	Qualitative Data	Quantitative Data	Qualitative Data
- Fare change vis-à-vis input cost changes (fuel cost) *[Cost]* - Change in number of operators over the years *[Growth]* - Number of licenses approved *[Growth]* - Cost of and time spent in obtaining a License *[Entry]* - Fleet size (number	- Licensing Process (terms and condition, time taken, tariffs) *[Entry]* - Route Allocation Mechanism *[Entry]* - Route Concentration Mapping *[Growth]*	- Price change (%) vis-à-vis fuel cost change (%) *[Price/Cost]* - Accident / Fatality data over the years *[Quality]* -Total change in the number of passengers over the years *[Growth]* -Frequency of buses (number of buses per	- Price Setting Mechanism *[Price/Cost]* - Route allocation *[Access]* -Existence of Quality standards for buses and their enforcement experience *[Quality]* - Safety norms (regulatory check for drivers and vehicles) *[Quality]* - Provision of information of bus routes and

Producer (Operator)		Consumer (Passenger)	
Quantitative Data	**Qualitative Data**	**Quantitative Data**	**Qualitative Data**
of buses)/ operator *[Growth]* - Total revenue (for operators) in the sector over the years *[Growth]*		day, week or month) per route *[Quality, Access]* -Percent of buses that are on time *[Quality]*	timetable *[Access]* **-** Reliability of buses—timeliness, stopping at all stops etc *[Quality]* - Types of substitutes and their usage *[Access]* - Variety/categories[9] of buses available *[Access]*

❸ <u>**Country Specific Reforms (Transport infrastructure)[10]**</u>

From the inputs of the country partners, it is evident that one of the key reform actions that would be examined in the countries is how provision of infrastructure (infrastructure reforms) in the bus transportation sector has helped operators to get better access to facilities, etc. From a consumer perspective, it would also be useful to assess how such actions have helped in improving the consumer experience at the bus stop/station and inside the bus. From the operator's perspective infrastructure improvements help their operations and allowing them to expand their route networks leading to growth

The following data would be required for this investigation:

Producer (Operator)		Consumer (Passenger)	
Quantitative Data	**Qualitative Data**	**Quantitative Data**	**Qualitative Data**
- No. of new investors in the markets over the years *[Investment]* - Operational cost and Overheads *[Cost]* - Amount of re-investment per year *[Investment]* - Expenditure towards road maintenance for promoting intra-city transport *[Investment]*	- Method of revenue sharing (in case of PPP) *[Cost]* - Terms and conditions for private players in tendering process *[Entry]* - Route Rationalisation *[Entry]* - Investment Promotion Schemes *[Investment]*	- Change in number of buses *[Access]* - Number of bus stations and bus stands over time *[Access]* -Number of possible destinations from a given stop *[Access, Growth]*	- Access to the bus stop/station*[Access]*

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[9] Variety (or categories) here pertains to different categories of bus services commonly available and differentiated in terms of size, comfort levels , capacity, speed, etc,

[10] From the inputs of country partners/researchers and PAC, it is necessary to assess how the provision of infrastructural facilities has helped operators and consumers/passengers. However, country partners/researchers are encouraged to reflect on the ground realities in their countries and frame the purpose of this examination in line with the overall aim of the project (i.e., what elements of market reforms in the bus transport sector seem to have benefitted consumers and producers).

Annex 1: Steps in Secondary Data Collection

Secondary data collection and research should be able to accomplished via desk research, or collecting the data from different government and/or non-governmental agencies. Various steps to be undertaken are listed below:

1. Identify variables on which data are to be collected, including the timeframe, frequency and the sources for the same. Some potential data sources include are listed in the table below:

Table 1: Potential Sources for Secondary Data

Secondary Data Sources	
Government documents	Independent think-tanks
Government databases	Business associations
Studies, articles, and analyses on the regulation	Private Sector Database like Annual Reports etc.
International organizations	Censuses
Research institutions	

2. After identifying the data available, the researcher should download all available data, clearly noting the source, link, and download date.[11] Some data might not be available online, in which case calling or emailing the agency for the data might be required. It is important to use the recently updated data[12] and check the credibility of the source.[13]

3. Read-only copies of the original data should be saved and left untouched; a second copy should be used for analysis. It may also be useful to print and save a pdf of the webpage with the original data. These steps are important because online data is frequently updated and may be overwritten. Additionally, the data may be inadvertently changed while conducting the analysis. Therefore having a back-up file is essential.[14]

4. It is important to review any notes or metadata to ensure that the researcher understands what is included in the data, how it was collected etc.

5. The missing values should to be labelled and a method to handle missing data should be identified.[15]

6. In cases when there are multiple sources for the same type of data, the data should be compared and discrepancies noted.[16]

7. There may be times when multiple sources must be combined to create a complete dataset. In these cases, the researcher needs to make a detailed comparison of any overlapping data and of the notes to make sure that this is appropriate. For example, it is not appropriate to combine price indices that have different base years. In other cases, adjustments may need to be made before combining data from multiple series into one series.

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[11] Collecting Secondary Data – research techniques article 3, BAX Interaction Limited
<http://www.baxinteraction.co.uk/blog/?p=135>
[12] Koziol, N.; Arthur, A. An Introduction to Secondary Data Analysis. Search Methodology Series. Nebraska Centre for Research. Slides - 15 and 16. <http://r2ed.unl.edu/presentations/2011/RMS/120911_Koziol/120911_Koziol.pdf>
[13] Workbook B. Conducting Secondary Research. Wallace Foundation. Page 10
<http://www.wallacefoundation.org/knowledge-center/after-school/collecting-and-using-data/Documents/Workbook-B-Secondary-Research.pdf>
[14] Ibid
[15] Ibid
[16] Secondary Data Research In A Digital Age. Cengage. Page 4
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