

Food system policy baseline assessment

Report from Vietnam

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Executive Summary

The objective of this policy baseline assessment was to provide a snapshot of the views and perceptions of policy-makers and key-actors in different domains directly related to food system in Vietnam. This work contributes in Vietnam to the Food System for Healthier Diet flagship implemented as part of the Agriculture for Nutrition and Health (A4NH) CGIAR Research Programme.

The research was based on primary data collected in Vietnam from Aug. to Sept. 2017, completed by secondary information from peer-reviewed articles and gray literature. The primary data was obtained through two types of surveys: (1) a series of face-to-face open-ended interviews conducted with key-informants; and (ii) an on-line semi-quantitative survey administered to a larger group of key informants.

The aim of the face-to-face interviews was to unpack and reveal the main stakeholders, narratives and power-relationships existing around the current legislations, practices, regulations and policies related to food systems. As for the on-line survey, a semi-quantitative questionnaire focusing on the beliefs, attitude, skills, and knowledge (BASK) of the key-actors was administered in relation to the main issues characterizing the food systems in Vietnam.

The analysis was organized around five structuring issues that were identified by a group of key-informants during a preliminary workshop. Those five key issues are: (i) urbanization, (ii) climate change, (iii) food safety, (iv) food trade policy, and (v) agro-biodiversity.

Thirty seven experts and decision-makers were interviewed face-to-face and 91 responded to the online BASK survey. The complete set of data generated through the on-line survey is downloadable from the link provided in Appendix C and the data collected during the face to face interviews is synthesized in Annexes D, E, F, G and H appended at the end of this report.

Overall the respondents considered their own knowledge and the knowledge of their colleagues within their respective institution in relation to food systems to be acceptable. The analysis also indicates that the different actors included in the survey do perceive themselves and their institution as relatively well equipped to comprehend food systems. The responses related to capacity reveal however a slightly different situation where both urbanization and climate change were identified as sectors for which key actors lack capacities in relation to food systems.

An important aspect of the baseline assessment revolved around the 'healthy' dimension of the food systems. In this regard the analysis suggests that the current situation is considered by many key-informants as non-satisfactory in several domains, including food safety, level of trust of consumers, accessibility of healthy food by the (urban) poor, and existence of supportive policies.

The data shows that for the vast majority of the respondents the main issue is related to food safety, followed by environmental health. At the same time all respondents, irrespective of their backgrounds, also consider that the current food system policy agenda reflects poorly the reality on the ground, and to a large extent is heavily influenced by advocacy –as opposed to evidence.

In terms of actors, the analysis highlights the very strong influence of the central authorities (ministries and related departments) which were systematically identified as the key players in relation to various issues around food systems. On the other end of the spectrum, civil society, end-users and their representatives (e.g. consumer organizations) seem to be still relatively marginalized in the direct decision making process.

Acknowledgments:

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Acronyms

A4NH	Agriculture for Nutrition and Health
ADI	Actors – Discourses – Interest framework
ASEP	Association of Seafood Exporters and Producers
BASK	Beliefs, Attitude, Skills, and Knowledge survey
CGIAR	Consultative Group for International Agriculture Research
FSHD	Food System for Healthier Diet
FAVRI	Fruit and Vegetable Research Institute
IDS	Institute for Development Studies
INGOs	International Non-governmental Organizations
MARD	Ministry of Agriculture and Rural Development
MoC	Ministry of Construction
MoF	Ministry of Finance
MoH	Ministry of Health
MoIT	Ministry of Industry and Trade
MoPI	Ministry of Planning and Investment
MoST	Ministry of Science and Technology
NCCC	National Committee on climate change
NGOs	Non-governmental Organizations
VCCI	Vietnam Chamber of Commerce and Industry
VFA ¹	Vietnam Food Administration
VFA ²	Vietnam Food Association
VPCC	Vietnam Panel on Climate Change

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1. Introduction

The objective of the Policy Baseline Assessment presented in this report was to conduct a baseline survey of the food system-related policies in Vietnam, with the ambition to use this assessment as the first component of a longer-term policy impact evaluation of the Food System for Healthier Diet (FSHD) Flagship. The FSHD is being implemented as part of the Agriculture for Nutrition and Health (A4NH) CGIAR Research Programme.

The aim of this policy baseline is to provide a snapshot of the views and perceptions of policy-makers and key-actors in different domains directly related to food system in Vietnam, and then to compare the results of this baseline with the results of a similar exercise undertaken toward the end of the FSHD flagship (endline assessment) in 2021 or 2022. The goal is to document the changes observed in those policy-makers' views and perceptions, assuming that some of these changes will be attributable to the FSHD activities¹.

In this context the objective of this report is to offer a comprehensive presentation of the key-findings of the baseline survey, as well as to document the methodology and tools that were applied to conduct this baseline.

2. Methodology

2.1. Overall framework

The research was based on primary data collected in Vietnam from Aug. to Sept. 2017, completed by secondary information from peer-reviewed articles and gray literature. The primary data was obtained through two types of surveys:

- a series of face-to-face open-ended interviews conducted with key-informants; and
- an on-line semi-quantitative survey administered to a larger group of key informants (including the respondents who had been included in the initial face-to-face interviews).

The participants to those two surveys were purposively sampled amongst the pool of national/international decision-makers and actors who are thought to shape and contribute to the current policy setting around food system in Vietnam. Those stakeholders were part of one of the four following groups:

- (a) government officials from relevant ministries and affiliated agencies;
- (b) key policy actors from the private sectors (e.g. owners of local supermarkets established in Hanoi);
- (c) representatives of civil society or local / international non-governmental organizations, and
- (d) technical experts from national or international research or development institutions.

¹ If resources are available a 'light' contribution analysis (Lemire et al. 2012) will also be implemented to link those changes (or lack of thereof) to the theory of change of the FSHD programme.

A preliminary workshop was organized at the start of the research with a group of 9 experts, with the objective to identify the drivers that are thought to be important with regard to Hanoi/Vietnam's food-systems. The experts identified five key drivers (in no particular order):

- (i) Food safety and its implications on human health;
- (ii) Trade policies and their impacts on food security and food systems;
- (iii) Climate change and its impacts on food systems activities;
- (iv) Change in agrobiodiversity and its links with diets;
- (v) Urbanization and its implications on food systems' actors.

These five key-drivers were then used to formulate some of the questions in both the face-to-face interviews and the online questionnaires.

2.2. Face to face Interviews

For the face-to-face open-ended interviews, the questionnaire was structured around an 'Actors – Discourses – Interest' (ADI) framework (Keeley and Scoones 1999; IDS 2006) with the aim to unpack and reveal the main stakeholders, narratives and power-relationships existing around the current legislations, practices, regulations and policies related to food systems.

The ADI framework integrates different ways of understanding policy-making, by looking at it through three analytical lenses: (i) discourses and narratives, (ii) actors and institutions, and (iii) politics and interests (Fig.1), which are relevant for the policy mapping which is to be implemented as part of the analysis (Table 1). The details of the guidelines used for the face-to-face open-ended interview are provided in Appendix A.

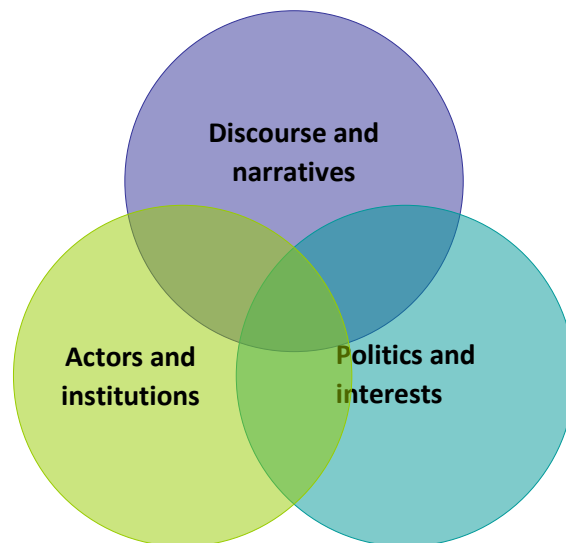


Fig.1. The ADI framework – Source Keeley and Scoones (1999) and IDS 2006

Table 1. Analytical Framework (adapted from IDS 2006)

Analytical Lens	Issues	Source of Data
1. Policy Narratives What is the 'policy narrative'? How is it framed through science and evidence?	<ul style="list-style-type: none"> ▪ What are the main issues related to food systems? ▪ What are the narratives/discourses behind them ▪ What are the influence of evidence (vs advocacy)? 	➤ Face-to-face interviews + published literature
2. Actors Who is involved and how are they connected?	<ul style="list-style-type: none"> ▪ Who are the main actors/institutions involved in food system-related issues ▪ What are the areas of converge/divergence in the positions of those actors 	➤ Face-to-face interviews + on-line survey
3. Politics and Interests What are the underlying power dynamics?	<ul style="list-style-type: none"> ▪ Political priorities and institutions' interests ▪ Winner/losers of the current policies ▪ Power on decision and agenda 	➤ Face-to-face interviews + gray and published literature

2.3. On-line survey

For the on-line survey, a semi-quantitative questionnaire focusing on the beliefs, attitude, skills, and knowledge (BASK) of the key-actors was administrated in relation to the main issues characterizing the food systems in Vietnam. The questions, organized around the four components (beliefs, attitudes, skills, and knowledge), were formulated based on psychometric techniques (self-evaluation) and then semi-quantified using a closed 1–7 score Likert-scale system. Two questions using this approach are presented in Table 2 for illustration. The BASK questionnaire was used to complete the qualitative information collected through the face-to-face survey and provides us with a deeper insight into the beliefs, attitudes, skills, and knowledge of these key-actors. The details of the on-line survey questionnaire are provided in Appendix B.

Table 2. Example of Likert-scale question used in the on-line survey

➤ On a scale from 1 = very poor to 7 = very good, what is your own level of knowledge and understanding about food systems?
➤ On a scale from 1 = do not agree at all, to 7 = fully agree where do you place yourself with the following statement: "The right/adequate policies are already in place to assure that the Vietnamese food system provides healthy diets"?

2.4. Anonymity of the respondents

The topic of food systems can include sensitive issues such as unclear processes of decision-making in land-use change, corruption, and negotiations between the private sector and high-level government officials. This sensitivity affected the interviews with the government officials and some of the other key-informants, many of which asked their names and affiliations not be disclosed. For the government officials in particular, their political positions made it difficult for them to openly talk about their personal views and disclose actual processes of decision-making. In the rest of this report, all respondents' identities have been removed and no unnecessary information related to their affiliations is disclosed.

3. Results

3.1. Sampling

Thirty seven experts and decision-makers were interviewed face-to-face and 91 responded to the online BASK survey. Through the purposive sampling approach adopted for this baseline we managed to maintain a relatively equal distribution of respondents across the five drivers (agrobiodiversity; climate change; food safety; trade; and urbanization) both in the face-to-face and online surveys – see Table 3a. In contrast the repartition between the four groups of respondents (civil society/NGOs; government institutions; private sector; and research/development agencies) is more unbalanced –see Table 3b- with a larger proportion of personnel from government and research/development agencies than from private sector or NGOs.

Table 3a. Numbers of respondents to the face-to-face interviews and online survey, grouped according to their own domain of expertise. Table 3b. Numbers of respondents to the face-to-face interviews and online survey, grouped according to their institutional affiliation.

(a) Domain of expertise	Face to face	Online survey	(b) Institutional affiliation	Face to face	Online survey
AgroBiodiversity	7	16	Civil Society organizations/NGOs	9	15
Climate Change	7	18	Governmental institutions	13	21
Food Safety	7	19	Private sector	3	6
Trade	8	19	Research/development agencies	12	49
Urbanization	8	19			
Total	37	91	Total	37	91

3.2. On-line survey's key-findings

The complete set of data generated through the on-line survey is downloadable from the link provided in Appendix C. In the following sections we present only the salient points that emerge from these data.

3.2.1. General knowledge on, and engagement, in the food system debates

A first step in the analysis was to check the (self-assessed) level of current engagement and knowledge of the different decision-makers in relation to the food system agenda. The assumption was that these levels of engagement and knowledge would vary, depending on the domains of expertise of these respondents. The data confirmed this general assumption, but with some nuances –see Fig.2a and Fig.2b. While overall the respondents considered their own knowledge and the knowledge of their colleagues within their respective institution to be acceptable (that is, above the mid-range value of 4.0)², two groups of experts admitted that their level of engagement with the food system debates have so far been relatively weak: the experts on urbanization and those on climate change. In contrast the experts on trade, food safety and to a lower extent agro-biodiversity considered that they have already engaged with the food system debate(s) in Vietnam. The data also indicates that there is no clear correlation between the level of knowledge and the intensity of engagement.

² We recall that the Likert-scale system used for the semi-quantitative analysis was a 7-level scale (from 1 to 7), meaning that 4 is the mid-range value.

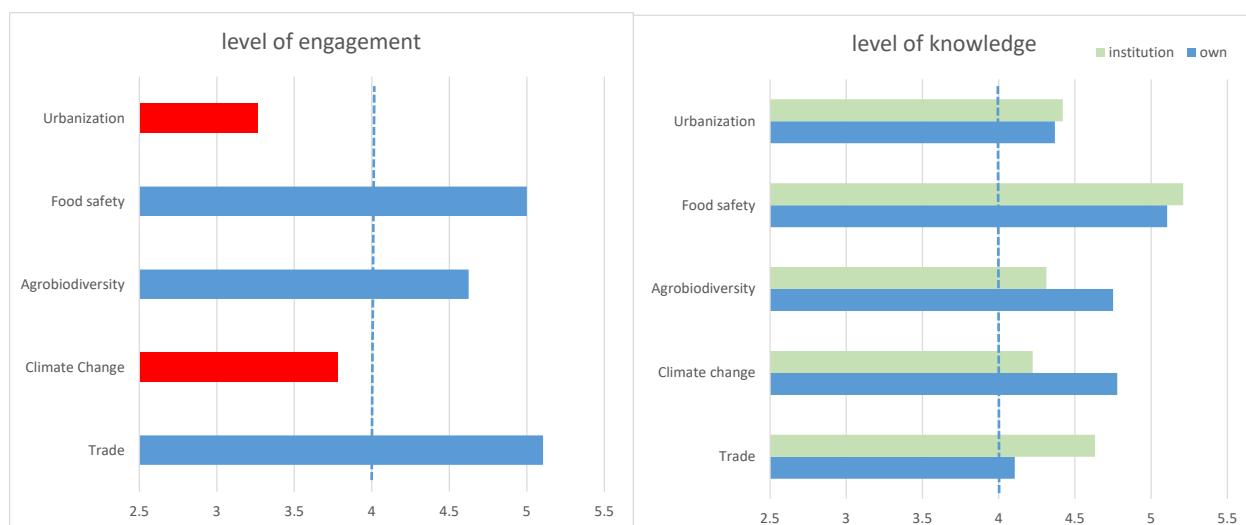


Fig.2a. Level of engagement of the respondents in relation to food systems and the five drivers listed on the left-hand side of the graph. Fig.2b. Level of technical knowledge of the respondents (in blue) and their institutions (in green) on the links between food systems and the five drivers. The vertical blue dotted lines represent the mid-range value (4.0) amongst the combination of possible coded answers (from 1 to 7). Responses below that mid-range value are indicated in red (N=91).

3.2.2. Do decision-makers consider that they comprehend the food systems?

It is often stated that “food systems are complex” and difficult to comprehend. As part of the baseline assessment of the FSHD we were therefore interested to establish the perceptions of the decision-makers about their own level of comprehension of the food systems in Vietnam, as well as those of their colleagues in their respective institution. The data (Fig.3a) reveals that the different actors included in the survey do perceive themselves and their institution as relatively well equipped to comprehend food systems. To a large extent this corroborates the results shown in Fig.2b where those same decision-makers stated that their level of knowledge about the relation/interaction between food systems and specific drivers (those listed on the left hand side of the graph) were acceptable. The only exception comes from the experts on climate change who consider that their own understanding of food system is relatively poor (Fig.3a). Interestingly those climate change experts were also amongst the two groups (along with urbanization experts) which recognize that their level of engagement with the food system agenda has so far been relatively low (Fig.2a).

As far as the levels of capacity and skills are concerned (Fig.3b), the data reveals a profile relatively similar to that describing the level of understanding, that is, one where both urbanization and climate change are identified as the two sectors with the lowest scores. The similarity with the scores related to the level of engagement (Fig.2a) is even more striking, suggesting that decision-makers’ level of engagement with a particular agenda (in our case food system) depends partially on whether or not they have capacities and skills to engage – a result which, in itself, is relatively coherent with what we could expect.

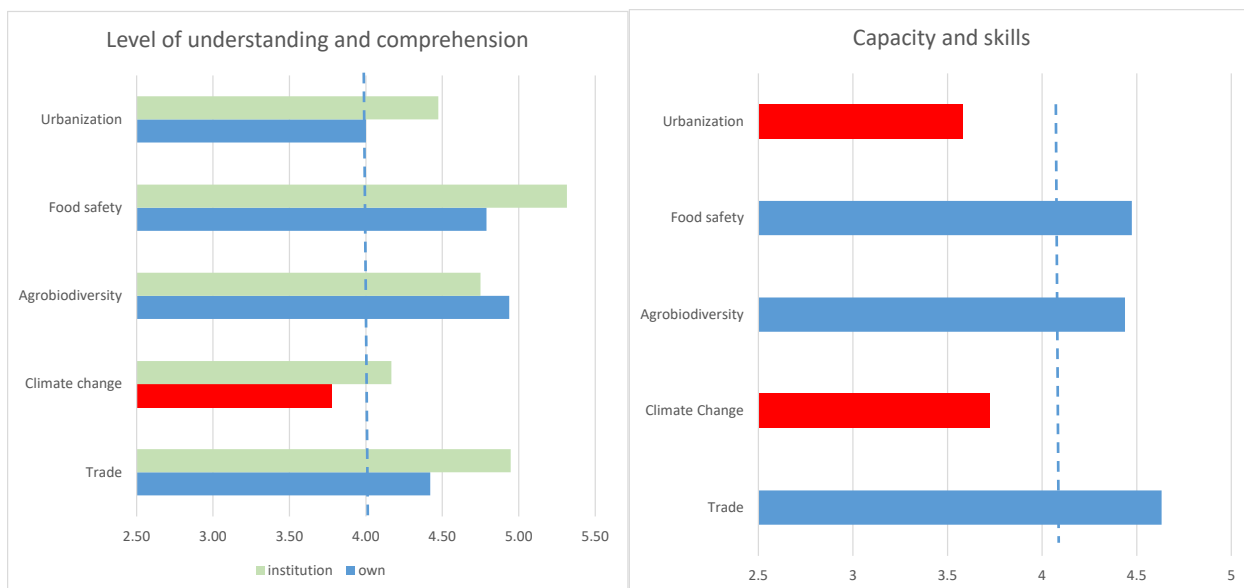


Fig.3a. Level of understanding/comprehension of the respondents (in blue) and their respective institutions (in green) in relation to food systems; Fig.3b. Level of capacity and skills of the respondents. The vertical blue dotted lines represent the mid-range value (4.0) amongst the combination of possible coded answers (from 1 to 7). Responses below that mid-range value are indicated in red (N=91).

3.2.3. *Is the food system policy agenda in Vietnam supporting a healthy diet?*

An important aspect of the baseline assessment revolves around the ‘healthy’ dimension of the food system in Vietnam. Consequently several questions had been included in the online survey to explore this specific question. This reflects the general focus of the FSHD flagship programme³ and the subsequent need to establish a baseline on this issue. The results are displayed in Fig.4. The data indicates that there is room for improvement in almost every aspects around this question of food system and health. The aggregated score across the groups of respondents appears above the mid-range value (4.0) –in fact just above (4.08)- for only one aspect (level of awareness of policy-makers), while for the remaining six other questions the scores are well below that mid-range value, suggesting that the respondents consider the current situation as non-satisfactory. The lowest score was observed for the question “How easy it is for consumers to trust that their food is healthy?” This relates to issues of food safety –which, as we shall see, will emerge as a central issue shaping the policy debate in Vietnam. It is also informative to observe that the second lowest score is obtained for the question “Are healthy diets accessible to the urban poor today in Vietnam?” suggesting that the decision-makers recognize that there are issues around the accessibility / affordability of healthy food for urban poor population. Whether this perception reflects the reality is difficult to assess in the case of Vietnam however.

³ <http://www.ifpri.org/publication/a4nh-flagship-1-food-systems-healthier-diets>

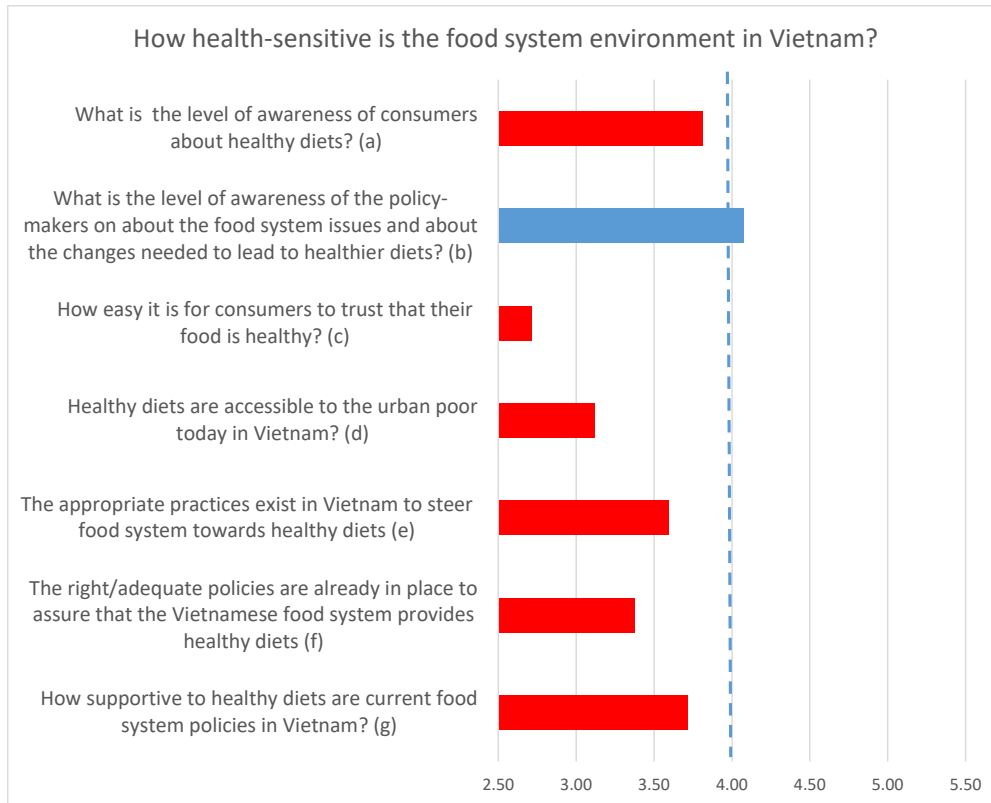


Fig.4. Food system and health. Results of a series of question around the issue of healthy diets.

Note (a) and (b) on a scale from 1 = not aware at all, to 7 = fully aware; (c) on a scale from 1 = not easy at all, to 7 = very easy; (d), (e) and (f) on a scale from 1 = do not agree at all, to 7 = fully agree; (g) on a scale from 1 = not supportive at all, to 7 = very supportive

3.2.4. Evidence-based versus lobbying?

An important interrogation around policy agenda setting relates to the prevalence of science and evidence –as opposed to advocacy and lobbying- and their respective influence on this agenda. One could expect to observe differences in the responses, reflecting the background of the respondents and also possibly the nature of the issues (assuming that certain issues may be more exposed to the pressure of advocacy or lobbying groups than others, but also that certain groups of actors / decision-makers may be more sensitive to evidence than to lobbying, or vice versa). The results only partially confirm this expected pattern (Fig.5). While private sector actors appear to be the group which gave the highest score to lobbying/advocacy influence (Fig.5a) and the lower score to evidence-based decision (Fig.5b), the respondents from research/development agencies did not display a higher score than their fellows from the private sector for evidence-based decision, suggesting that, in their view, the policy setting in Vietnam is not necessary based on evidence. Officers from government agencies or civil society/NGOs activists, in contrary, seemed to consider that the policy agenda is still based on evidence.

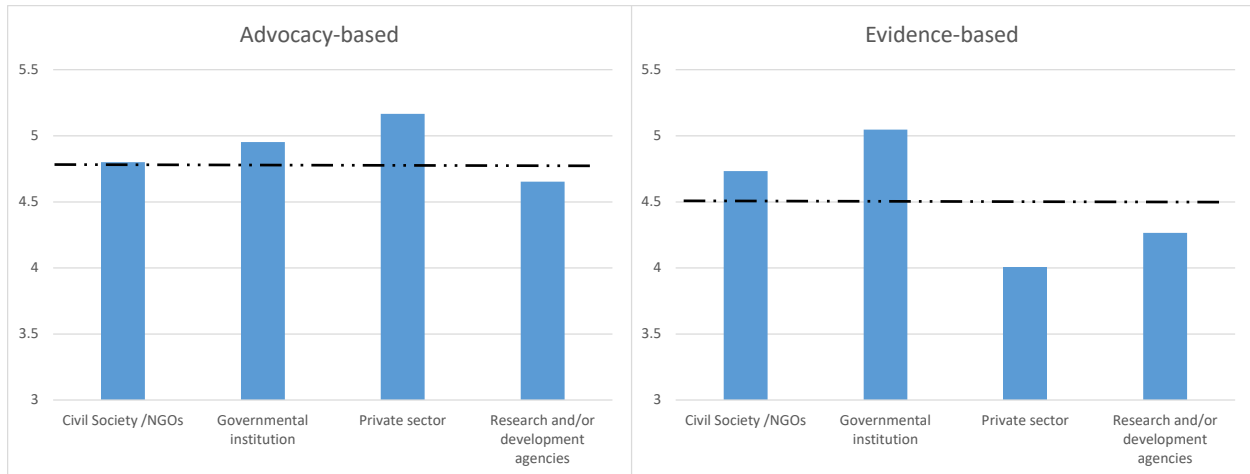


Fig.5a. Levels of advocacy influencing the policy agenda on food system as perceived by the four different groups of actors included in the surveys: civil society/NGOs; government institutions; private sector; and research/development agencies. Fig.5b. Levels of evidence-based policy-process as perceived by the same groups of actors. The horizontal black dotted lines represent the average values across the four groups for the two series: 4.78 for advocacy, and 4.51 for evidence, (N=91).

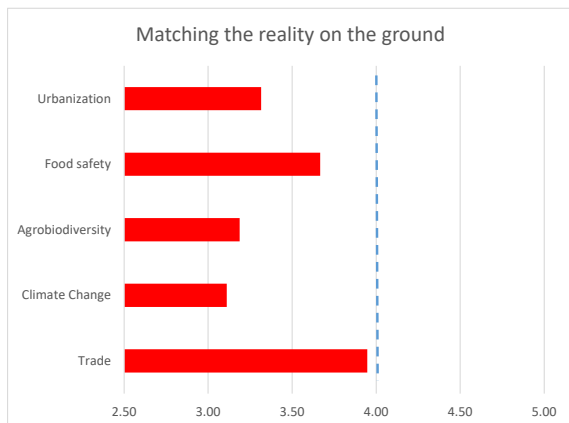


Fig.6. Extent to which respondents consider that the current agenda of food system matches the reality on the ground. The vertical dotted line represents the mid-range value (4.0) amongst the combination of possible coded answers (from 1 to 7). Responses below that mid-range value are indicated in red, (N=91).

They however also gave a relatively high score to advocacy and lobbying (Fig.5a)⁴. Overall the average scores obtained across the four groups of experts is higher for lobbying than for evidence (evidence aver=4.51; lobbying aver=4.78). In this context it is interesting to also notice that all respondents, irrespective of their backgrounds, consider that the current food system policy agenda reflects only poorly

⁴ Additional analysis (not shown here) indicates that the nature of the issue does not seem to affect the perception that key-actors have about the influence of evidence or advocacy on the debate. In all cases the score were between 4 and 5 along the Likert-scale.

the reality on the ground (Fig.6). For all five groups of actors, their average scores were below the mid-range 4.0.

3.2.5. What drives the policy agenda in Vietnam in relation to food systems?

Although the key-informants had been selected amongst relevant institutions based on their recognized expertise/experience in relation to specific issues on food systems, we were interested to get their opinion about what the main overall issues are when it comes to food systems policy in Vietnam.

The data shows that for the vast majority (65%) of the respondents across the four groups the main issue is related to food safety (Fig.7)⁵. When disaggregated by institutional affiliation, the overall picture remains the same (Table 4). Irrespective of their affiliations, most actors considered food safety as the key issue. This is the case for three quarter of the respondents from research/development agencies, and for 46% of the actors from civil society/NGOs. For another 33% of those, however, the main issue is environmental health. Finally it is worth noticing that there is no apparent denial from the governmental agencies about the food safety issue. Fifty two percent of governmental officers we interviewed also identified food safety as the issues No.1, even if the government is often presented as being partially responsible for the situation (see below).

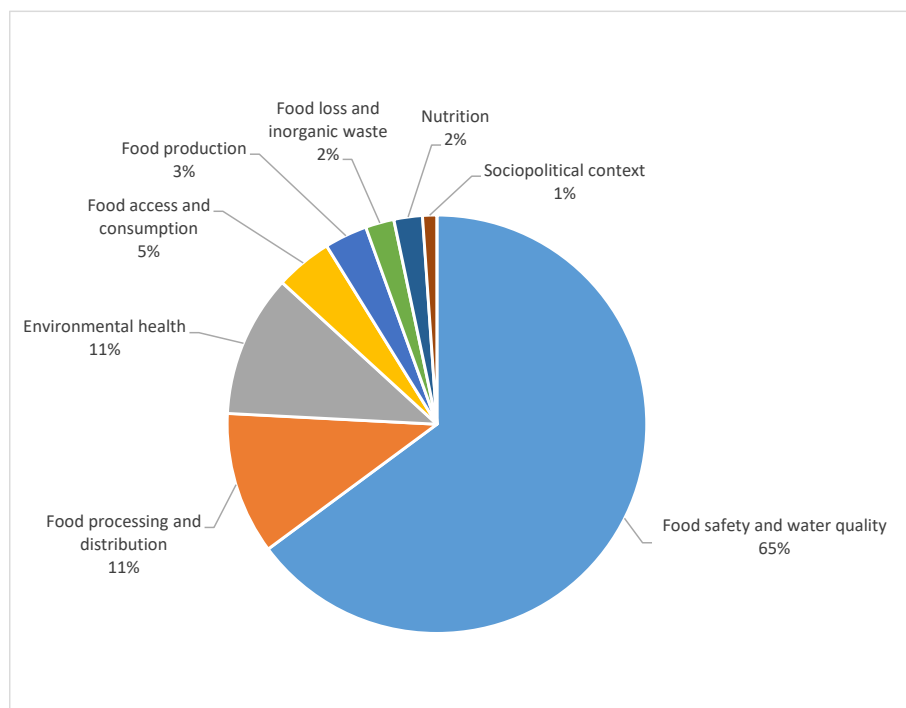


Fig.7. Main areas of issues related to food system in Vietnam, as identified by key-actors, (N = 91).

⁵ Those were chosen by the respondents amongst a list of nine pre-coded answers (no multiple responses allowed).

Table 4. Main issues related to food system in Vietnam, as identified by key-actors (N = 91) grouped according to their institutional affiliations.

Civil Society /NGOs	N = 15	Private sector	N = 6
Food safety and water quality	46.7%	Food safety and water quality	66.7%
Environmental health	33.3%	Sociopolitical context	16.7%
Food access and consumption	6.7%	Food processing and distribution	16.7%
Food production	6.7%		
Governmental institutions	N = 21	Research and development agencies	N = 49
Food safety and water quality	52.4%	Food safety and water quality	75.5%
Food processing and distribution	28.6%	Food access and consumption	6.1%
Environmental health	14.3%	Food processing and distribution	6.1%
Food production	4.8%	Environmental health	4.1%
		Food loss and inorganic waste	4.1%
		Nutrition	2.0%
		Food production	2.0%

3.3. Face-to-face interviews

In this section we present the key-findings of the face-to-face interviews. We recall that the data was generated through questionnaires structured around the ‘Actors – Discourses – Interest’ (ADI) framework (Keeley & Scoones 1999; IDS 2006). Adopting the ADI framework means we were particularly interested in identifying and exploring who the main actors are, the different narratives and stories-telling used by those key-actors, as well as considerations of power relationships.

3.3.1. Urbanization policy and food system

3.3.1.1. Main actors and institutions

Twenty one different actors (individual and/or institutions) were specifically mentioned during the face-to-face interviews (some being mentioned more than once). These key policy actors are listed in Table 5 along with the type of institutions they belong to. A large majority of those key influencing actors are public and/or political institutions from the central or local governments. More discussion will be provided on this specific point in the section 3.3.1.3. below.

Table 5. Key policy actors mentioned by the respondents during the interviews, in relation to urbanization and food systems (in no particular order).

Key policy actors	Type of institutions
Ministry of Construction	Government
Ministry of Industry and Trade	Government
Ministry of Planning and Investment	Government
Department of Domestic Market (under Ministry of Industry and Trade)	Government
Ministry of Transportation	Government
Hanoi People’s Committee	Government

Central government	Government
Municipal level authority	Local Government
Vietnam Women's Union	Government - political institution
The leaders of the Communist Party	Government - political institution
The chairman of the Hanoi People's Committee	Local Government - political institution
The Communist Party	Local Government - political institution
Interest group (Elites)	Private sector and Government
Big private corporations	Private sector
Construction enterprises	Private sector
Real estate agents	Private sector
Banks (both private and public)	Financial institutions
Foreign consultants	Research - Technical experts
Hanoi Institute of Social and Economic Development Studies	Research - Technical experts
City residents (via social medias)	End-users
Urban residents	End-users

3.3.1.2. Policy narratives related to urbanization

Several *policy issues* related to the interaction between urbanization and food systems were identified by the respondents during their face-to-face interviews. The comprehensive list and description of those different issues is provided in Appendix D. Although those issues varied in their nature and scope, they can be broadly grouped into two main framing narratives: (i) Issues related to the process of urbanization *per se*, and the impacts that this (physical) process has on various dimensions and actors of the food systems, and (ii) Issues related to the governance and decision-making process around urbanization, and the implications that this (social and/or political) process has on the local food systems and their actors.

What the data reveal is that, as part of their story-lines justifying particular policy responses, policy-makers and experts were more likely to associate the issues with narrative and solutions which are technical in nature when those issues were related to the process of urbanization *per se*; whereas issues of the second type (around the decision-making process) were more likely to be associated with 'political' solutions (used in its etymological sense, that is, "the art or science of government"). For instance falling in the first category of narratives (urbanization *per se*) is the story where "the policy is not addressing the issues comprehensively. MoC [Ministry of Construction] focuses on building in urban areas to accommodate increasing population. However, once many people have moved to a high-rise building, transportation system usually gets stuck. Traffic jam [become recurrent], which is not addressed" (informant UR7). The respondent's proposed solution to this issue was technical: "Comprehensive planning and implementation are required".

In contrast the policy issues which were more closely related to the decision-making process around urbanization and food systems were generally associated with political or governance responses. For instance Informant UR6 explained that "the current decision-making process [around urbanization planning] is not open to people, and it is possible for the high level government decision-makers to modify a plan based on their own interests." In that particular case the respondent's suggested solution was to increase the accountability of the government through the use of social media, acknowledging that "[social media such as] Facebook is increasingly getting important for the government to understand what people think. [It contributes to] Raising voices" (Informant UR6).

Beyond the technical-versus-political aspect of the narrative, another dimension that emerged as a structuring component in the framing of those key-actors is the *scope* of the issue. While some policy

issues remain confined to the initial domain/sector where they originated (in this case urbanization), others are presented as having spillover implications on one, or sometimes, two other sectors. In the case of urbanization the two sectors that were most frequently mentioned as being affected (in the context of food systems) were the environment and consumer food/diets. Some urbanization issues would affect one sector –for instance the concentration of business and residential areas resulting from a poor urban planning was mentioned by Informant UR4 as having negative externalities on the environment – while the traditional silo effect that generally leads to poor collaboration between ministries is an issue that was acknowledged to affect not only the process of urbanization itself, but also the policies related to environment or agriculture, as well as those related to diet and food (informant UR7). Likewise, the change in life-style induced by urbanization -“people now are busy, they have no time for cooking, no time for eco-friendly life”- was presented in some of the narratives as “contributing to the current (negative) urban food systems which are not sustainable, not eco-friendly, not healthy, [and] supporting the big corporations rather than small-scale farmers” (Informant UR2), and as such perceived as having negative effect on both the environment and people’s diet.

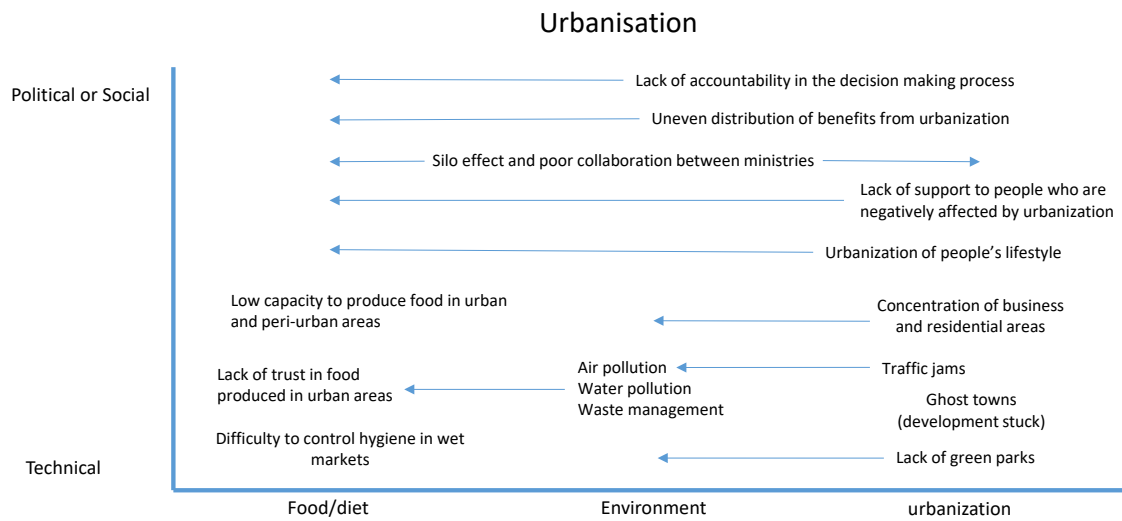


Fig.8. Framing of the food system policy issues as identified by the respondents in the context of urbanization. Blue arrows indicate spillover impacts on other sectors.

Fig.8 offers a graphical representation of the main urbanization-food system policy issues and the way they were framed by the decision-makers. The vertical axis captures the technical versus political dimension of the policy narratives, while the arrows along the horizontal axis reflect the scope, that is, the extent to which the issues as they were framed by the respondents spill over other domains. In addition to the issues already mentioned above, several other major unwanted consequences of urbanisation on food systems were identified. Those include the declining capacity of the urban centers to maintain food security due to the imbalance of agriculture and non-agricultural land; the creation of “ghost towns” (resulting from urban development implemented without necessarily responding to demand) which exacerbates the low food production capacity of the areas by being built on some of the most fertile land suitable for agriculture; and the lack of infrastructure whereby basic physical systems are not being developed, including waste management or transport, which has severe consequence on the functioning

of the local food systems. Addressing those different issues would require strong collaboration among the different ministries and a cross-sectoral planning approach. This is a major challenge in the current government structures, which –like in many other low and middle income countries- are characterized by a severe silo syndrome.

3.3.1.3. Power, interest, and influence

To complete this first element in the policy analysis, the political economy (understood as who are the winners/losers) of each of the narratives told by the respondents were explored through a series of questions aimed to identify the underlying politics and hidden agenda (if any) around the issues. Two dimensions of power were more specifically investigated. First, the level of influence in society and social structures, that is, the respondents’ interpretations about who benefits the most from a particular policy and who are excluded or marginalised because of that policy, and whether those aspects of (in)equity were implicitly or explicitly part of the policy narratives. The second aspect of power explored was the influence in decision-making processes: whose ideas are taken up and what are the underlying motivations. For example, land-use policy is believed to be closely associated with private sector actors who approach government officials with money. In this case, those policies are likely to be formulated not based on social and economic priorities by different stakeholders but by some individuals (or groups) with the power to pursue their own interests.

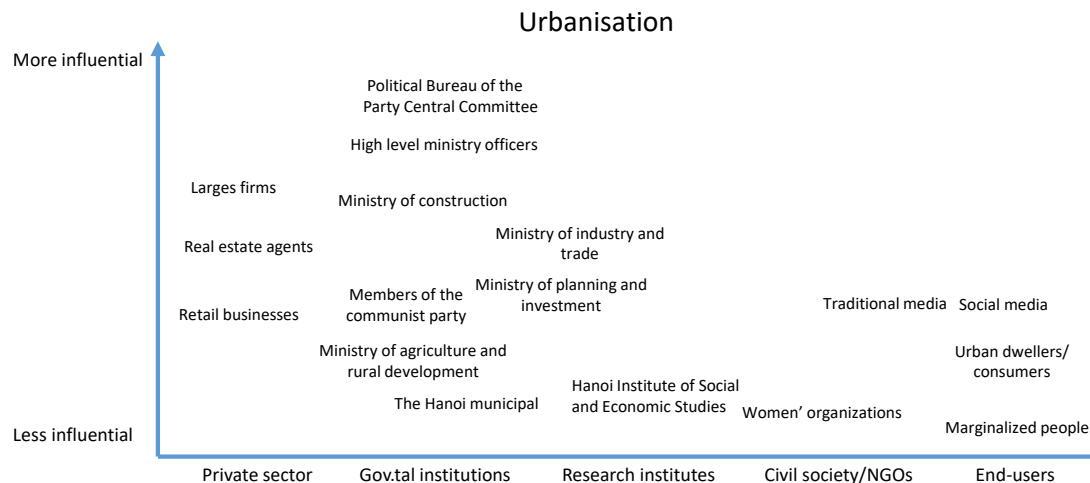


Fig.9. Map of key-actors and their respective levels of influence as perceived by the respondents, in relation to urbanization and food systems.

The responses of the key-informants were synthesized and “mapped” out graphically along two axis: one horizontal axis mapping the different key-actors mentioned in the narratives; and one vertical axis reflecting the degree of power/influence of these different actor(s) (from less influential to more influential). Fig.9 shows the map that was constructed in the case of the interaction urbanization – food system. The state government appears to be very influential in setting policies at national level. Interviewees frequently mentioned the Ministries of Construction (MoC), Industry and Trade (MoIT), and Planning and Investment (MoPI) as well as the communist party. Although the Ministry of Agriculture and Rural Development (MARD) shares its information and opinions with other ministries, it is the MoC that

decides whether or not to consider opinions of other ministries. In this respect, the MoC appears to be the dominant actor in urban planning at national level.

On the other hand, the actors who implement the plans at municipal level differ significantly from those involved in the planning process. The main actors for decision-making at municipal level referred to in the interviews are the leaders of the communist party; the chairman of the Hanoi People’s Committee; local elites (who have social power and connections with high-level government officials); and big national firms associated with urban construction, retail business, and real estate. “Decisions are often made through one phone call (by an individual from a real estate, a bank, and/or a construction industry) to the high-level government officials” (Informant UR3). Research institutions were not mentioned, except the Hanoi Institute of Social and Economic Studies, whose research findings are reflected in the decisions and priority-settings of the Hanoi municipal government.

At the other end of the influence gradient, Hanoi residents are perceived to have only limited influence over the government leaders’ decisions and priority setting. Interestingly this limited influence was said to come through a non-conventional channel: media, and in particular, social media. As one junior government officer admitted, “The government cannot ignore people’s voices in the social media and the traditional media [i.e. newspapers]” (Informant UR6). This influence differs from the official process of people’s participation in policy planning⁶ and seems to be more effective. Some respondents pointed out, however, that the traditional media are not paying attention to everyone in the same way and that the voices of marginalised people, such as non-resident street vendors, are not necessarily heard. In particular it seems that the public voice is more likely to be heard if it is perceived to contribute to the agenda of (food system) modernization.

The policy issues and actors related to the four other main drivers (trade, agro-biodiversity, climate change, and food safety,) were analyzed using the same approach and frameworks then the one presented just above for urbanization. The key-findings of these four other drivers are now presented.

3.3.2. Climate change

3.3.2.1. Main actors and institutions

Thirteen different actors (individual and/or institutions) were mentioned during the face-to-face interviews in relation to climate change and food systems. These are listed in Table 6 below along with the type of institutions they belong to. The data indicate that the vast majority of those key policy actors are governmental institutions. More discussion will be provided on this specific point in section 3.3.2.3. below.

Table 6. Key policy actors mentioned by the respondents in relation to climate change and food systems

Key policy actors	Type of institutions
Department of Science, Technology and Environment (under MARD)	Government
Ministry of Industry and Trade	Government
Vietnam Institute of Meteorology, Hydrology and Climate change (IMHEN)	Government

⁶ Officially, Hanoi residents can participate to the policy planning: first they would have to raise the issue to the ward government of their residential areas, the ward government would next inform the district government. The issue is then passed on to the municipal government and finally to the national government.

Office of Climate Change Adaptation/The Steering Committee for Climate Change Mitigation and Adaptation, MARD	Government
Ministry of Planning and Investment	Government
Ministry of Agriculture and Rural Development (MARD)	Government
National Committee on Climate change (NCCC)	Government
Vietnam Panel on Climate change (VPCC)	Government
Department of Climate change (under MoNRE)	Government
Ministry of Natural Resources and Environment (MoNRE)	Government
Institute of Strategy and Policy on Natural resources and Environment (ISPONRE)	Government - research institute
NGOs	Non-governmental Organizations
Donors and development agencies	International development agencies

3.3.2.2. Policy narratives related to climate change

Several policy issues related to climate change and food systems were identified by the respondents during their face-to-face interviews. The comprehensive list and description of those different issues is provided in Appendix E, while the main ones are discussed below.

Applying the same technical versus political distinction that was used above for the urbanization, it is interestingly to notice that a lot of the climate change issues identified by the respondents are in effect due to the (poor) implementation of policies -as opposed to the impact of climate change *per se*. In fact only one issue was clearly related to climate change; that is, the recognized impact that the climate-related extreme events (e.g. tropical storm, floods) as well as long-term climate change related stresses (e.g. sea level rise) have on agriculture productivity. The other major issues identified by the respondents were all about the poor stage of implementation of policies and the ineffective governance / decision making process. In this category the primary issue (which partially explains many subsequent ones) is the poor communication and collaboration that exist between the different ministries in charge of different aspects of climate change-related policies (MARD, MoNRE, MoIT, etc.), and the typical silo syndrome whereby institutions and individuals do not speak to each other and end up generating incoherent, diverging, competitive or even conflicting policies was mentioned by several respondents. In that context, food system –and for instance the impact that climate-change related extreme events have on food systems- was almost completely absent from the discussion (with the exception of the issue of climate-related events on the production sector).

At the local level, respondents explain that small-scale enterprises and local authorities generally do not have the resources, capacities and expertise to deal with climate change. As a consequence climate change related issues (adaptation and mitigation) are not considered/treated as priorities at that level, even though it is also recognized that local level is the appropriate level for effective interventions.

Fig.10 offers a graphical representation of the main climate-change-food system policy interactions and the way they were framed by the decision-makers. Like in Fig.8 above, the vertical axis captures the technical versus political dichotomy of the policy narratives, while the blue arrows along the horizontal axis reflect the scope, that is, the extent to which the issues as they were framed by the respondents spill over other domains. Fig.10 shows that the effect of this spillover on other sectors is not as clear or well-established in the narratives on climate change as it was for urbanization for instance, or for food safety or trade (see below). This confirms that the links between climate change and food system are not yet well understood/established amongst the different policy makers – a results that was already suggested by the online survey (cf. Fig.3a and 3b).

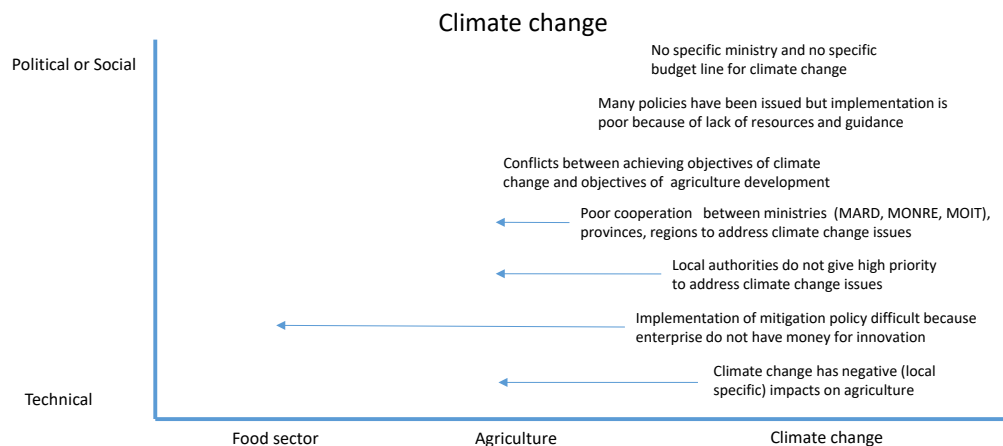


Fig.10. Framing of the food system policy issues as identified by the respondents in the context of climate change. Blue arrows indicate spillover impacts on other sectors.

3.3.2.3. Power, interest, and influence

The same way that it was done for urbanization, series of questions had been included in the face-to-face questionnaire to explore the power dynamics around the questions of climate change and food systems. The responses of the key-informants were analyzed and “mapped” out graphically along two axis (Fig.11): one horizontal axis showing the different key-actors mentioned in the narratives; and one vertical axis reflecting the degree of power/influence of these different actor(s) as perceived by these key-informants. As suggested by Table 6, the policy agenda around climate change appears to be essentially influenced by governmental institutions and in particular the central government at national level. Several Ministries including MoNRE, and MARD, as well as specific departments within MoNRE such as the Department of Climate Change, were frequently mentioned. Donors, international development agencies and non-governmental organizations seems to have also some degree of influence but certainly not comparable to the central government. At the other end of the spectrum, small-scale farmers and vulnerable groups such as (urban) poor, elderlies and disable people were identified by the respondents as mainly excluded from the decision-making process. Also blatantly absent from this map (as well as from Table 6) is the private sector, suggesting that at the present time the private sector actors seem to be relatively excluded or absent in the agenda setting of policies around the interaction between climate change and food systems in Vietnam.

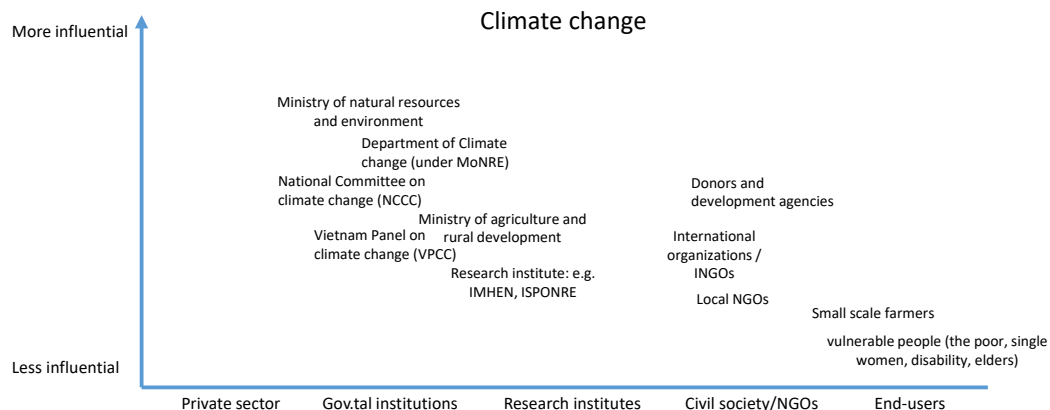


Fig.11. Map of key-actors and their respective levels of influence as perceived by the respondents, in relation to climate change and food systems.

3.3.3. Food safety

3.3.3.1. Main actors and institutions

Twenty four different actors (individual and/or institutions) were identified by the respondents during the face-to-face interviews in relation to the issue of food safety. These are listed in Table 7 along with the type of institutions they belong to. While a large number of the influencing actors are governmental institutions, several actors from the private sector as well as civil society were also mentioned.

Table 7. Key policy actors mentioned by the respondents in relation to food safety and food systems

Key policy actors	Type of institutions
Ministry of Agriculture and Rural Development (MARD)	Government
Ministry of Information and Communications	Government
Ministry of Justice	Government
Ministry of Natural Resources and Environment (MoNRE)	Government
Ministry of Science and Technology (MoST)	Government
Department of Legal Affairs	Government
Ministry of Agriculture and Rural Development (MARD)	Government
Ministry of Health (MOH)	Government
Ministry of Industry and Trade (MoIT)	Government
Food Safety Agency	Government - Technical experts
The Central Inter-Agency Steering Committee for Food Hygiene and Safety	Government - Technical experts
Vietnam Food Administration (VFA ¹)	Government - Technical experts
National Agro-Forestry-Fisheries Quality Assurance Department (NAFIQAD) - MARD	Government - Technical experts
Vietnam Fatherland Front	Government - political institution
Local authorities Provincial level authorities	Local Government
Enterprise Protection Associations	Private sector
Small and Medium Enterprises	Private sector
Vietnam Chamber of Commerce and Industry (VCCI)	Private sector
Associations (e.g. Vietnam Organic Agriculture Association, Vietnam Association of Seafood Exporters and Producers VASEP etc.)	Private sector
Department of Science and Technology	Research - University
Consumer Protection Association	Civil Society Organization
Vietnam Standards and Consumers Association (Vinastas)	Civil Society Organization
INGOs (Oxfam, SNV, VECO, etc.)	Non-governmental Organizations
Donors and development agencies	International development agencies

3.3.3.2. Policy narratives related to food safety

Several policy issues related to food safety and food systems were identified by the respondents during their face-to-face interviews. The comprehensive list and the description of those different issues are provided in Appendix F, while the main ones are highlighted below.

As for the two previous drivers (urbanization and climate change) the nature of the issues identified by the policy-makers in relation to food safety range from technical issue (e.g. low capacity to reinforce regulations in both agriculture and food chain sectors) to more political issues such as the separation of the food safety agenda between different ministries (MARD, MoIT, MoH) and the subsequent poor coordination and policy incoherency that ensues from this situation. Other main issues include the poor enforcement and compliance for traceability; the lack of resources to ensure the necessary monitoring and supervision of food production and distribution; the lack of budget to deal with and discard unsafe food and food that is smuggled in Vietnam; and the producers' lack of knowledge of, and poor compliance to the regulations for the use of toxic chemicals and drugs (e.g. antibiotic). Those different issues are represented on Fig.12. The graph also suggests that the link between food safety issues and agriculture (food production) is very well acknowledged in the narratives used by the policy-makers to discuss food safety.

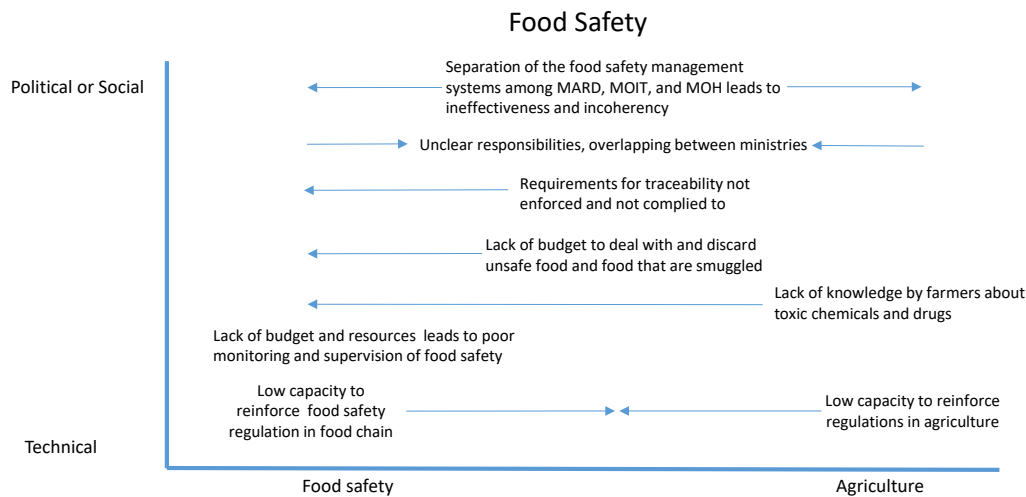


Fig.12. Framing of the food system policy issues as identified by the respondents in the context of food safety. Blue arrows indicate spillover impacts on other sectors.

3.3.3.3. Power, interest, and influence

In contrast to Fig.11 for climate change, and more in line with the pattern observed in Fig.9 for urbanization, Fig.13 below shows that as far as the agenda on food safety is concerned the private sector is perceived as having some degrees of influence. Of course the central authorities was still presented by the respondents as the key players (in particular the MoH, MoIT and MARD) but other actors were mentioned as well, including civil society, consumer organizations, and non-governmental organizations, along with national and international research institutes. An unexpected 'new comer' on this landscape is the media, both the conventional (newspapers, TV) but also less conventional media such as social media. To some extent Fig.13 is probably the most 'diversified' and pluri-actors map amongst the five key-actor

maps that were generated through this baseline survey, suggesting that food safety is one of the few issues related to food system for which the policy agenda is shaped by a multiple interactions taking place between a wide range of different actors. The literature indicates, however, that the central authorities still remain one of the central actors and shows how they instrumentalize those interactions around food safety issues to ensure that their wider agenda is addressed (Wertheim-Heck et al., 2015).



Fig.13. Map of key-actors and their respective levels of influence as perceived by the respondents, in relation to food safety and food systems. Note: ⁽¹⁾ Vietnam Organic Agriculture Association ⁽²⁾ Vietnam Association of Seafood Exporters and Producers

3.3.4. Food trade policy

3.3.4.1. Main actors and institutions

Twenty four different actors (individuals and/or institutions) were specifically mentioned in relation to trade policy and food systems during the face-to-face interviews. These are listed in Table 8 along with the seven types of institutions they belong to. While a large number of those influencing actors are governmental institutions, several actors from the private sector as well as civil society were also mentioned.

Table 8. Key policy actors mentioned by the respondents in relation to food trade and food systems

Key policy actors	Type of institutions
Domestic Market Department - MoIT	Government
Ministry of National Defense	Government
Ministry of Science and Technology (MoST)	Government
Department of Legal Affairs - MoIT	Government
Ministry of Justice	Government
Ministry of Natural Resources and Environment (MoNRE)	Government
Ministry of Planning and Investment (MoPI)	Government
Ministry of Health (MoH)	Government
Ministry of Finance (MoF)	Government
Ministry of Agriculture and Rural Development (MARD)	Government
Trade Promotion agency, online trade agency - MoIT	Government - Technical experts

Political Bureau of the Party Central Committee	Government - Political institution
The National Assembly	Government - Political institution
Department of Industry and Trade at provincial level	Local Government
Companies and large corporations	Private sector
Vietnam Chamber of Commerce and Industry (VCCI)	Private sector
Vietnam Animal Feed Association	Private sector
Vietnam Association of Small and Medium Enterprises (VASME)	Private sector
VINAFOOD	Private sector
Research institute and University	Research - University
Research institute: IPSARD and Commerce Research Institute	Research - Technical experts
The State Bank of Vietnam	Financial institutions
Coffee Association, Cocoa, and pepper, Vietnam Association of Seafood Exporters and Producers - VASEP, Animal Feed Association	Private sector
NGOs	Non-governmental Organizations

3.3.4.2. Policy narratives related to food trade

Fig.14 is a graphic representation of the main issues identified by the respondents during the face-to-face interviews in relation to trade. The detailed list of the associated narratives is provided in Appendix G. Fig.14 shows the wide range of varied issues which were identified as well as their spillover effects into both the food safety and the agriculture domains, suggesting that trade is a key element in the multi-sectoral nature of food system dynamics. As with the three previous drivers discussed above, some of the issues identified under the trade driver are purely technical and usually associated with technical solutions. A good example of this is the lack of quality control conducted on imported and domestic products. In particular Vietnam depends heavily on raw feed imported from abroad, which makes it is hard to control the quality of feed (both imported and domestic feed). According to some respondents the regulations on importation of raw feed such as protein powder, meat and bone grinders for livestock are unclear and many types of bad quality feed are thus imported into the country, raising issues of food safety. The solution proposed by the respondents is the development of clearer technical standards and regulations for raw materials. At the other end of the spectrum, a highly political issue is the current negotiation with the WTO in relation to the free trade agreement that Vietnam signed in 2007. Because that agreement will lead to the opening of the domestic markets to foreign commodities, the Vietnamese authorities fear for the domestic producers who soon are likely to compete with cheaper and possibly higher quality products. The government has therefore been actively negotiating to “protect” specific sectors including agriculture.

Beyond those, several other issues related to trade and food systems are displayed in Fig.14. Those include: the existence of regulations and laws which make it difficult for investors to shift land from agriculture (food production) to any other type of activity including food distribution. This means that the country is ‘locked’ into a food production dynamics while a great deal of investments is necessary in the other parts of the food systems. Another important issue that was mentioned by several respondents is the current *de facto* ‘monopoly’ that some government/parastatal agencies impose in relation to the exportation of rice. Any private enterprise that wants to export rice cannot just to do it freely, they would need first to register with the Vietnam Food Association (VFA²) whose chairmen are VINAFOOD 1 and 2 – the two state owned companies who are the only two companies that are currently allowed to export rice. Beyond this specific example many respondents also mentioned the existence of “hidden transaction costs” (bribes and corruptions) which hamper the development of an efficient food system. Part of these hidden transaction costs are the consequences of unclear regulations in relation to branding and

trademarks. Finally like it was the case for food safety, trade activities fall under the supervision of several ministries (in particular MoIT and MARD, but also Ministry of Finance (MoF), or MoH), meaning that the current poor collaboration and coordination observed between those different ministries leads to incoherent and sometime conflicting policies.

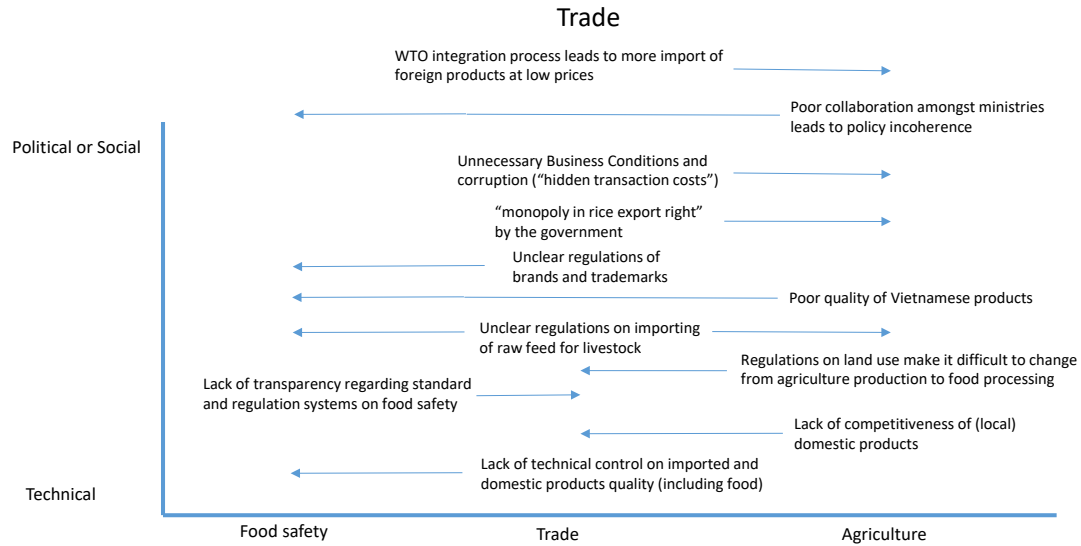


Fig.14. Framing of the food system policy issues as identified by the respondents in the context of trade. Blue arrows indicate spillover impacts on other sectors.

3.3.4.3. Power, interest, and influence in food trade

To some extent the institutional landscape for trade in relation to food system in Vietnam (Fig.15) is similar to that observed for urbanization presented above (Fig.9) in the sense that respondents acknowledge the central role of the government but also the importance of the private sector. Within the government spheres, the MoIT and MARD -and within the MoIT, the Department of Legal Affaires- were specifically mentioned; as for the private sector, this includes some of the large-scale retailing companies as well as some of the large foreign retail companies. At the top of the institutional 'pyramid' the influence of the Political Bureau of the Communist Party is said to be critical (as in the case of urbanization) –but, interestingly, this particular actor did not appears explicitly in any of the major narratives on trade (see Fig.14 above), suggesting the possibility of some hidden (behind the scene) power. At the other end of the spectrum small-scale producers and processors/sellers, as well as consumers were presented as the least influential actors in the food system in relation to trade policies.



Fig.15. Map of key-actors and their respective levels of influence as perceived by the respondents, in relation to trade and food systems.

3.3.5. Agro-biodiversity

3.3.5.1. Main actors and institutions

Thirty different actors (individuals and/or institutions) were identified by the respondents during the face-to-face interviews in relation to agro-biodiversity and food systems. These are listed in Table 9 along with the different types of institutions they belong to. As for the other drivers discussed above the vast majority of those influencing actors are governmental institutions, several of which with specific technical expertise.

Table 9. Key policy actors mentioned by the respondents in relation to agro-biodiversity and food systems

Key policy actors	Type of institutions
Ministry of Culture and Information	Government
Ministry of Finance (MoF)	Government
Ministry of Health (MoH)	Government
Ministry of Industry and Trade (MoIT)	Government
Ministry of Justice	Government
Ministry of Planning and Investment (MoPI)	Government
Vietnam National Administration of Tourism	Government
Ministry of Education and Training	Government
Ministry of Agriculture and Rural Development (MARD)	Government
Ministry of Natural Resources and Environment (MoNRE)	Government
Ministry of Science and Technology (MoST)	Government
Prime Minister	Government
Department for protection of biodiversity	Government – technical experts
Department of Nature Conservation, MARD	Government – technical experts
Forest Protection Department, MARD	Government – technical experts
Biodiversity Conservation Agency, MoNRE	Government – technical experts
National Institute of Animal Sciences	Government – technical experts
National Institute of Medical Materials	Government – technical experts
Northern Mountainous Agriculture & Forestry science institute (NOMAFI)	Government – technical experts
People’s Committee of Provinces/Central Cities	Local Government - political institution
Ecological Institute, Vietnam National University of Agriculture (VNUA)	Research - Technical experts
Fruit and Vegetable Research Institute (FAVRI)	Research - Technical experts

Institute for Agriculture
 Institute of strategy for agriculture
 Vietnam National University
 Plant Resource Center
 CGIAR centers
 Farmer's Union
 Conservation NGOs (IUCN, etc.)
 Donors and Development agencies

Research - Technical experts
 Research - Technical experts
 Research – technical experts
 Research – technical experts
 Research – technical experts
 End-users Private sector
 Non-governmental organization
 International development agencies

3.3.5.2. Policy narratives related to agro-biodiversity

Several policy issues related to agro-biodiversity and food systems were identified by the respondents during their face-to-face interviews. The comprehensive list and the description of the narratives around those different issues are provided in Appendix H, while the main ones are presented graphically in Fig.16 and highlighted below.

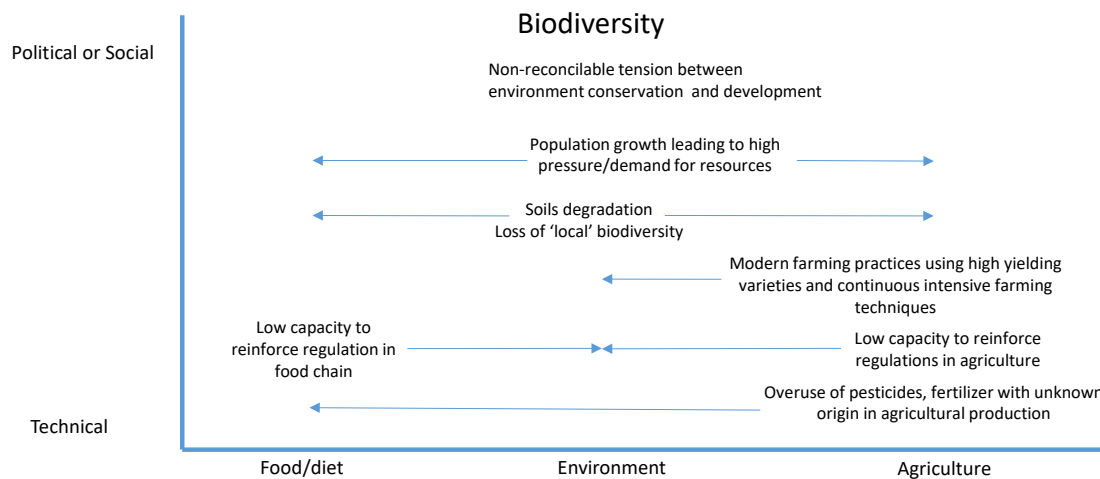


Fig.16. Framing of the food system policy issues as identified by the respondents in the context of agrobiodiversity. Blue arrows indicate spillover impacts on other sectors.

Fig.16 shows that several of those narratives revolve around the lack of capacities of the local and central authorities to re-inforce the current regulations on pesticides and chemicals in the agricultural as well as food distribution sectors, leading to non-compliances and detrimental consequences on the environment and especially on biodiversity. In parallel the adoption of modern, intensive farming practices is also presented by the respondents as a major cause of environmental damage including soil degradation and loss of both biodiversity and agro-biodiversity. All those issues are to a large extent mainly technical. At a more political/governance level, respondents also refers to difficult choices / trade-offs to be made between on one hand the need to modernize the economy and respond to the demands and aspirations of a growing and financially more comfortable urban population and on the other hand the need to protect the environment. Fig.16 also shows the existence of numerous spillover effects (blue arrows) that link the domain of the environment with those of agriculture and/or food and diet.

3.3.5.3. Power, interest, and influence in relation to agro-biodiversity

The profile of the institutional landscape related to agro-biodiversity and food system is not fundamentally different from the previous ones generated for the other drivers. The central authorities were once again identified by the respondents as the most influencing group. In particular MARD and MoNRE, but also the Ministry of Science and Technology (MoST) were specifically mentioned. Several government-based institutes were also named -although recognized to be less influential (e.g. Department for protection of biodiversity or the Biodiversity Conservation Agency –under MoNRE)- along with conservation NGOs. This is consistent with the information displayed above in Table 9. As with the previous institutional mapping exercise, consumers and small-scale producers (and ethnic minorities) were identified by the respondents as being the least influential actors.

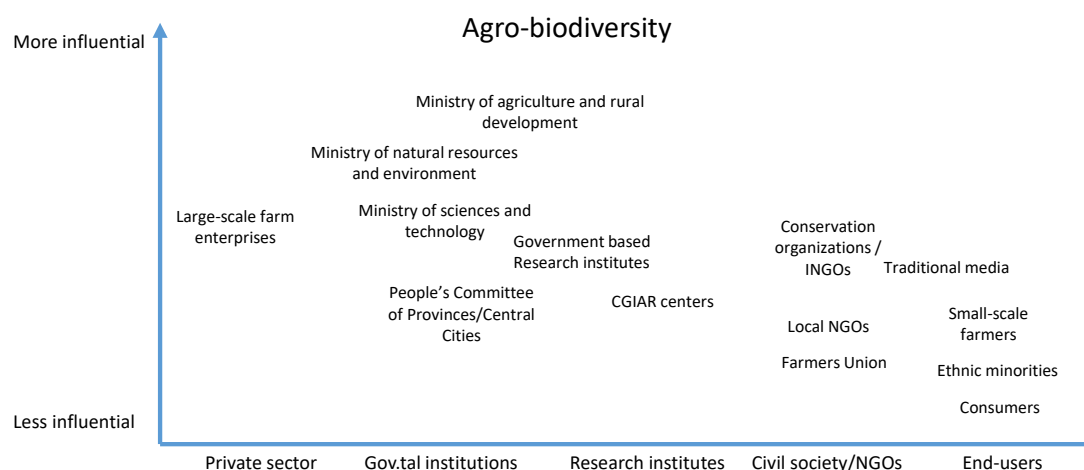


Fig.17. Map of key-actors and their respective levels of influence as perceived by the respondents, in relation to Agrobiodiversity and food systems.

4. Concluding remarks

The main objective of the policy baseline exercise presented in this report was to provide a snapshot of the policy dynamics taking place in several policy domains related to food system in Vietnam. In this context the objective of the report was to offer a comprehensive presentation of the key-findings of the policy baseline, as well as to document the methodology and tools that were applied to conduct this baseline.

The baseline survey was successfully conducted between Aug and Sept 2017, only few months after the FSHD programme officially started, which means that the information that was obtained through both the online survey and face-to-face interviews can reasonably be assumed to represent the situation in Vietnam before the FSHD started.

Five policy domains were initially identified by a group of experts as potential key drivers for the food systems in Vietnam; those are: food safety, trade, agro-biodiversity, climate change and urbanization. Those domains were used subsequently to structure our analysis.

Overall the different results obtained through the survey display a certain level of coherency even if some of those results differ from what we had initially imagined. First the key-informants consider that their knowledge about food systems and the knowledge of their colleagues within their own institution is satisfactory. With the exception of questions related to urbanization and climate change those experts also consider that their engagement with the food system has also been acceptable. Almost logically those experts also responded that overall their level of understanding of the food systems issues is adequate. The results obtained in relation to their skills and capacities is more mixed. Here again experts working in relation to urbanization and climate change feel that their skills and capacities are not sufficient while the other experts consider that their skills and capacities are satisfactory.

Overall all the experts interviewed consider that the food systems in Vietnam is not healthy. Compared to other country this result may appear quite surprising –given for instance that Vietnam is home to some of the slimmest peoples in the world with an average Body Mass Index (BMI) for both men and women around 21⁷ (Abarca-Gómez et al., 2017). Yet the vast majority of the national and international experts we interviewed rated Vietnamese food systems as not healthy and identified the lack of trust of consumers for the food available on markets as being a major issue. To some extent those observations also echo the other result which shows that key policy actors consider food safety as the issues no.1 in Vietnam at the present time.

One can then raise the question of whether these experts' perceptions (or more generally Vietnamese people's perception) are in line with the reality on the ground and whether Vietnamese food systems are effectively unsafe and unhealthy. Interestingly the experts we interviewed admitted that it may not be the case and that many decisions taken in relation to food systems are only thinly based on evidence. But it is also important to remind ourselves that social sciences have long shown that people's decision are usually not based on facts but on the *perceptions that people have* about those facts. This reality was one of the initial reasons why part of the questions included in the interviews were focusing on the attitudes, perception and views of these key actors, and not just on facts.

Another key finding that emerged from the institutional mapping that was carried out as part of this baseline exercise is the very strong influence that the different ministries and related departments were systematically said to have on the decision processes and policy setting of the different domains related directly or indirectly to food systems. Perhaps this observation should not come as a surprise in a country which economy is still very much centralized and where the government as well as the political bureau of the communist party are trying to maintain a strong control over the entire social development process. In only two domains (food safety and urbanization) is the private sector recognized to have some degree of influence –partially because it brings additional financial resources which the government does not have. On the other hand, civil society, end-users and their representatives (e.g. consumer organizations) are still relatively marginalized in the direct decision making process; and the influence that social media seem to have gained recently in relation to specific questions (in particular food safety) may very well be the result of a form of instrumentalization by the authorities which see the discontent expressed through these social media as the way to pursue their own wider agenda.

To finish; the underlying objective of this assessment is to use the information generated by this baseline as the first component of a longer-term policy impact evaluation of the Food System for Healthier Diet

⁷ The percentage of people whose BMI are above 30 (obesity) remains around 2-3 % while in USA, around 60% of male and female adults have BMI above 30.

(FSHD) Flagship with the intention is then to re-evaluate the situation in five years when the FSHD flagship ends and to compare the results of this initial baseline with the data generated through a similar exercise (endline). The goal is to document and possibly quantify the changes observed in those policy-makers' views and perceptions, and where possible try and relate these changes to specific activities of the FSHD.

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Appendix A. Face-to-face open ended interview – guidelines.

1. Food safety policies and implications on food system

Actors and networks

- *Who are the key policy actors⁸ (in the government and outside) which have a say in the policy agenda on food safety? At which level?*

Sense of the “dynamics” around the agenda setting:

- *Are there some specific persons/institutions who can be considered as a champion (e.g. prime minister, minister of health, some private entrepreneurs, etc.) (pushing the agenda) –or is it the result of a combination/interactions of actors / institutions?*
- *Why and how are they considered as the champion?*
- *Are there some ‘groups’ or networks of actors who are closer/converge/share the same view? What are the issues having the same view? Why do they share the same view? Are there any meetings/discussions? How do they come to the same view?*

Homogeneity/ disparity in the positions of those different actors around the issue:

- *Do you see different actors to have different / conflicting views / interpretations about this issue? Is there some disagreement between different actors (maybe the civil society organizations have a slightly different view) about the cause of the problem?*
- *If yes, what kind of different/conflicting views/interpretation are there? Example? What leads to the differences? When do the differences occur? Which effects do the differences create?*
- *Are there any disagreements among the actors about approaches to address this issue? If yes, what are they and how do they occur?*

Narrative

- *According to you what is / are the cause(s) of the problem? What is the nature of the problem? What are the main challenges that Vietnam is facing in relation to food safety? Why Vietnam is in this situation?*
- *What approaches should be used to address the issues?*
- *Which tools or instruments should be put in place to address the issue? How can we resolve this issue? Which actors should be leading this?*
- *Do you think that the way the problem has been handled is appropriate? What would you do differently? What do you think should be the solutions?*

⁸ Actors might include first official and government at national and then more municipal level, then international development organization (e.g. UN agencies) bilateral and multilateral donors (e.g. World bank), international and national non-governmental organization, civil society organization, international and national research organization/institute, and foreign investment/international corporation (e.g. Unilever, Bayer, etc.)

Power – influence

- *Are there any specific groups or actors (i) wet market sellers, (ii) street vendors, (iii) peri-urban producers, owners of more formalized enterprises such as supermarkets, etc.) that are benefiting from new policies on food safety?*
- *If yes, which specific groups or actors get the most benefits? What are the benefits? Describe, please!*
- *Are there some groups that are being negatively affected (e.g. in terms of food access for the poor for instance)? What are the negative effects? Which specific groups or actors will be influenced?*
- *Who/which group/actor(s) has been pushing for new policies to be formulated? Who has driven the discussion? Was there some pressure from the media, or the public opinion? What exactly is that?*
- *In contrast are there some groups which have been (or are still are) arguing against the way the issue is currently handled? Who are these groups?*

2. Current trade policies and implications on food system

Actors and networks

- *Who are the key policy actors (in the government and outside) which have a say in the policy agenda on trade policies? At which level?*

“Dynamics” around the agenda setting:

- *Are there some specific persons/institutions who can be considered as a champion (e.g. prime minister, MOIT, MARD, some private entrepreneurs, etc.?) (pushing the agenda) – or is it the result of a combination/interactions of actors / institutions? Why and how are they considered as the champion?*
- *Are there some ‘groups’ or networks of actors who are closer/converge/share the same view? What are the problem or issue having the same view?*

Homogeneity/ disparity in the positions of those different actors

- *Do you see different actors to have different / conflicting views / interpretations about this issue? Is there some disagreement between different actors about the cause of the problem?*
- *If yes, what kind of different/conflicting views/interpretation are there? What leads to the differences? Are there any disagreements among the actors about approaches to address this issue? Please specify.*

Narrative

- *According to you what is / are the potential issues related to trade policy issues (Domestic trade development and value chain, Trade policies and market and price management, International integration and agricultural products and processed food, etc.)? What is the nature of the problem? What are the main challenges that Vietnam is facing? What makes Vietnam situation special?*

The perceived 'solution':

- *What is being done by the government and other actors (e.g. civil society or private sector) to address these issues? How is it being done? Which actors lead this? What is planned to be done by the government and other actors? How can it be planned to be done? Which actors lead this?*
- *Do you think that the way the problem has been handled is appropriate? What would you do differently?*

Power – influence

- *Are there any specific groups or actors ((i) enterprises, (ii) consumers, (iii) producers, (iv) owners of more formalized enterprises such as supermarkets, etc.) that are benefiting from? If yes, which specific groups or actors get the most benefits? What are the benefits?*
- *Are there some groups that are being negatively affected (e.g. in terms of food access for the poor for instance)? What are the negative effects? Which specific groups or actors will be influenced?*
- *Who/which group/actor(s) has been pushing/driven for the policy issues (domestic trade development and value chain, trade policies and market and price management, international integration and agricultural products and processed food, etc.) to be formulated?*
- *Was there some pressure from the media, or the public opinion, or private sector? What exactly is that?*
- *In contrast are there some groups which have been (or are still are) arguing against the way the issue is currently handled? Who are these groups?*

3. Climate change policies and implications on food system

Actors and networks

- *Who are the key policy actors (in the government and outside) which have a say in the policy agenda on climate change?*

“Dynamics” around the agenda setting:

- *Are there some specific persons/ institutions who can be consider as a champion (pushing the agenda) –or is it the result of a combination of actors/institutions? Are there some ‘groups’ or networks of actors who are closer/converge/share the same view?*

Homogeneity/ disparity in the positions of those different actors around the issue:

- *Do you see different actors to have different / conflicting views / interpretations about this topic? Is there some disagreement between different actors about the way Vietnam should address this?*

Narrative

- *According to you what is / are the potential issues related to Climate change? What are the main challenges that Vietnam is facing? What make Vietnam situation special?*
- *Which tools or instruments should be put in place to improve the situation? How can constrains be removed? Which actors should be leading this?*

Depending on the identity of the respondent, more direct questions could be envisaged:

- *Do you think that the way the CC policies have been handled is appropriate? What would you do differently?*

Power – influence

Identify the underlying politics and hidden agenda (if any) around the issue.

- *Are they any specific groups or actors that are benefiting from the current approach/policies adopted by the government on CC? Are there some groups that are being negatively affected by these CC policies?*
- *Who/which group/actor(s) has been pushing for the [policy document title here] to be formulated? Who has driven the discussion? Was there some pressure from the media, or the civil society? In contrast is there some groups which have been (or are still) arguing against the way the issue is currently handled?*

4. Current agrobiodiversity policies and implications on food system

Actors and networks

- *Who are the key policy actors (in the government and outside) which have a say in the policy agenda on (agro)biodiversity?*

“Dynamics” around the agenda setting:

- *Are there some specific persons/ institutions who can be consider as a champion (pushing the agenda) –or is it the result of a combination of actors/institutions? Are there some ‘groups’ or networks of actors who are closer/convergence/share the same view?*

Homogeneity/ disparity in the positions of those different actors around the issue:

- *Do you see different actors to have different / conflicting views / interpretations about this agenda? Is there some disagreement between different actors about the situation?*

Narrative

- *According to you what is / are the main issues related to agrobiodiversity that can influence on food systems? What are the main challenges that Vietnam is facing? What make Vietnam situation special?*

Questions should not simply are aimed at the cause of the problem but also at the perceived 'solution' -as sometimes the divergent views are not about the issue but about how to fix it.

- *Which tools or instruments should be put in place to improve the situation? How can constrains be removed? Which actors should be leading this?*

Depending on the identity of the respondent, more direct questions could be envisaged:

- *Do you think that the way the problem has been handled is appropriate? What would you do differently?*

Power – influence

- *Are they any specific groups or actors that are benefiting from the current approach/policies adopted by the government on agrobiodiversity? Are there some groups that are being negatively affected by these policies?*

Some issues are coming to the top of the agenda faster than others for different reasons are

- *Who/which group/actor(s) has been pushing for the [policy document title here] to be formulated? Who has driven the discussion? Was there some pressure from the media, or the civil society? In contrast is there some groups which have been (or are still) arguing against the way the issue is currently handled?*

5. Current urbanization policies and implications on food system

Actors and networks

- *Who are the key policy actors (in the government and outside) which have a say in the policy agenda on urban development such as land use change, infrastructure and transport and the use of public space for street vendors ?*

“Dynamics” around the agenda setting:

- *Are there some specific persons/ institutions who can be consider as a champion (pushing the agenda) –or is it the result of a combination of actors/institutions? Are there some 'groups' or networks of actors who are closer/convergence/share the same view?*

Homogeneity/ disparity in the positions of those different actors around the issue:

- *Do you see different actors to have different / conflicting views / interpretations about this agenda? Is there some disagreement between different actors (maybe the NGOs and governmental institutions have a slightly different view) about what should be done?*

Narrative

- *According to you what is / are the main issues related to land use change/infrastructure and transport/ regulations on the use of public spaces in the rapidly urbanizing context? What are the impacts of the on-going policy on food systems, especially for the poor and*

marginalized social groups (e.g. women, migrants and ethnic minorities)? What make Vietnam situation special? Could be used for this purpose.

Questions should not simply be aimed at the cause of the problem but also at the perceived 'solution' -as sometimes the divergent views are not about the issue but about how to fix it.

- *Which tools or instruments should be put in place to improve the situation? How can constraints be removed? Which actors should be leading this?*

Depending on the identity of the respondent, more direct questions could be envisaged:

- *Do you think that the way the problem has been handled is appropriate? What would you do differently?*

Power – influence

- *Are there any specific groups or actors that are benefiting from the current approach/policies adopted by the government on urbanization? Are there some groups that are being negatively affected by these policies?*

Some issues are coming to the top of the agenda faster than others for different reasons are

- *Who/which group/actor(s) has been pushing for the policy on the land use/infrastructure and transportation/the use of public space for informal business or the subsidies on private food sectors (e.g. supermarket) to be formulated? Who has driven the discussion? Was there some pressure from the media, or the civil society? In contrast are there some groups which have been (or are still) arguing against the way the issue is currently handled?*

Appendix B. On-line survey questionnaire

A. Please, provide basic information about yourself!

Institution/organization: _____

Current position: _____

What type of institution/organization is it?

- Governmental institution
- National or international NGO
- University and/or national research institute
- Civil Society organization (farmers, consumers, women, etc.)
- CGIAR Center
- Private sector
- Development agency / donor
- Other (please specify): _____

What is your gender?

- Male
- Female

What has been the main focus of your work in the last two years? *(You can choose more than one option)*

- Nutrition
- Agriculture
- Development/poverty alleviation
- Health
- Trade
- Climate change
- Urban development/planning
- Service industry
- Other (please specify): _____

B. Generic Questions

1. On a scale from 1 = nothing, to 7 = a great deal, what has been your level of involvement in food system discussions and debates in Vietnam in the last 12 months?

2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your institution's involvement in food system discussions and debates in Vietnam in the last 12 months?
3. On a scale from 1 = very poor to 7 = very good, what is your own level of knowledge and understanding about food systems?
4. On a scale from 1 = very poor, to 7 = very good, what do you think the level of knowledge and understanding is about food systems within your own institution (i.e. among your colleagues)?
5. According to you what is the No. 1 issue in Vietnam when it comes to food system?
 - Environmental health
 - Food loss and inorganic waste
 - Food safety and water quality
 - Food production
 - Food processing and distribution
 - Food access and consumption
 - Sociopolitical context
 - Nutrition
 - Others: _____
6. On a scale from 1 = very low to 7 = very strong, how would you evaluate the level of collaboration among the different governmental organizations to deal with issues related to food systems?
7. On a scale from 1 = not supportive at all, to 7 = very supportive, according to you, how supportive to healthy diets are current food system policies in Vietnam? Could you provide us with a concrete example (in few words) justifying your response?
8. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on food system in Vietnam shaped and influenced by science and evidence?
9. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on food systems in Vietnam shaped and influenced by advocacy and lobbying (by private and/or public actors)?
10. On a scale from 1 = not close to the reality to 7 = very close to the reality, according to you, to what extent is the current policy agenda on food system in Vietnam reflecting the reality on the ground?
11. On a scale from 1 = not environment-sensitive at all to 7 = very environment-sensitive, according to you, how sensitive to environmental issues is the overall food system policy context in Vietnam? Could you provide us with a concrete example (in few words) justifying your response?

12. On a scale from 1 = do not agree at all, to 7 = fully agree where do you place yourself with the following statement: "The right/adequate policies are already in place to assure that the Vietnamese food system provides healthy diets"?
13. On a scale from 1 = not active at all, to 7 = very active, according to you, how active are NGOs and Civil Society Organizations in relation to food system issues in Vietnam?
14. On a scale from 1 = do not agree at all, to 7 = fully agree, where do you place yourself with the following statement: "The appropriate practices exist in Vietnam to steer food system towards healthy diets"? Please provide some examples of type of appropriate practices and who is promoting these.
15. On a scale from 1 = very low, to 7 = very high, how do you consider the capacity and technical ability within your own institution to deal with issues related to food systems?
16. On a scale from 1 = do not agree at all, to 7 = fully agree where do you place yourself with the following statement: "Healthy diets are accessible to the **urban poor** today in Vietnam"?
17. On a scale from 1 = not easy at all, to 7 = very easy, how easy it is for consumers to trust that their food is healthy?
18. On a scale from 1 = not aware at all, to 7 = fully aware, according to you, what is the level of awareness of the policy-makers about the food system issues and about the changes needed to lead to healthier diets?
19. On a scale from 1 = not aware at all, to 7 = very aware, what is according to you the level of awareness of consumers about healthy diets?

C1. Specific questions for urbanization

1. From 1 = very poorly to 7 = very well managed, how would you rate the current situation about urban development in Vietnam? Can you justify in a 2-line sentence your answer
2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your involvement in the consideration/discussion of urbanization directly or indirectly related to food systems in Vietnam in the last 12 month? Please specify one of the issues that were considered/discussed.
3. On a scale from 1 = very poor to 7 = very good, what is **your own level** of knowledge about the relationship between urbanization and food systems and diets in Vietnam?
4. On a scale from 1 = very poor to 7 = very good, what is the level of knowledge and understanding **within your institution** about the relationship between urbanization and food systems and diets in Vietnam?

5. On a scale from 1 = not supportive at all to 7 = very supportive, according to you, how supportive to a healthy diet are current urban development policies in Vietnam? Please provide us with a concrete example (in few words) justifying your response.
6. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on urbanization in Vietnam shaped and influenced by science and evidence.
7. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on urbanization in Vietnam shaped and influenced by advocacy and lobbying (by private and/or public actors)?
8. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding of urban residents about urban development planning in Vietnam?

C2. Specific questions for climate change

1. From 1 = very poorly to 7 = very well managed, how would you rate the current situation about climate change in Vietnam? Can you justify in a 2-line sentence your answer
2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your involvement in climate change consideration/discussion in Vietnam in the last 12 months? Please specify one of the issues that were considered/discussed!
3. On a scale from 1 = very poor to 7 = very good, what is **your own level** of knowledge about climate change issues affecting food systems in Vietnam?
4. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding **within your institution** on climate change issues affecting food system in Vietnam?
5. On a scale from 1 = not supportive at all to 7 = very supportive, according to you, how supportive to food system issues are current climate change-related policies in Vietnam? Please provide us with a concrete example (in few words) justifying your response!
6. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on climate change in Vietnam shaped and influenced by science and evidence?
7. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on climate change in Vietnam shaped and influenced by advocacy and lobbying (by private and/or public actors)?
8. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding of people about climate change issues and their potential effect on food systems in Vietnam?

C3. Specific questions for food safety

1. From 1 = very poorly to 7 = very well managed, how would you rate the current situation about food safety in Vietnam? Can you justify in a 2-line sentence your answer
2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your involvement in food safety consideration/discussion in Vietnam in the last 12 months? Please specify one of the issues that were considered/discussed
3. On a scale from 1 = very poor to 7 = very good, what is **your own level** of knowledge about food safety issues leading to healthy diets in Vietnam?
4. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding **within your institution** on food safety issues leading to healthy diets in Vietnam?
5. On a scale from 1 = not supportive at all to 7 = very supportive, according to you, how supportive to a healthy diet are current food safety-related policies in Vietnam? Please provide us with a concrete example (in few words) justifying your response!
6. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on food safety in Vietnam shaped and influenced by science and evidence?
7. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on food safety in Vietnam shaped and influenced by advocacy and lobbying (by private and/or public actors)?
8. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding of consumers about food safety issues in Vietnam?

C4. Specific questions for trade

1. From 1 = very poorly to 7 = very well managed, how would you rate the current situation about food trade in Vietnam? Can you justify in a 2-line sentence your answer.
2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your involvement in trade consideration/discussion directly or indirectly related to food systems in Vietnam in the last 12 months? Please specify one of the issues that were considered/discussed!
3. On a scale from 1 = very poor to 7 = very good, what is **your own level** of knowledge about relationship between trade issues, food systems, and healthy diets in Vietnam?
4. On a scale from 1 = very poor to 7 = very good, what is the level of knowledge and understanding **within your institution** about the relationship between trade issues, food systems, and healthy diets in Vietnam?

5. On a scale from 1 = not supportive at all to 7 = very supportive, according to you, how supportive to a healthy diet are current trade policies in Vietnam? Please provide us with a concrete example (in few words) justifying your response!
6. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on trade in Vietnam shaped and influenced by science and evidence?
7. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on trade in Vietnam shaped and influenced by advocacy and lobbying (by private and/or public actors)?
8. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding of consumers about domestic and international trade situation in Vietnam?

C5. Specific questions for agrobiodiversity

1. From 1 = very poorly to 7 = very well managed, how would you rate the current situation about agrobiodiversity management/conservation in Vietnam? Can you justify in a 2-line sentence your answer
2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your involvement in agrobiodiversity consideration/discussion in Vietnam in the last 12 months? Please specify one of the issues that were considered/discussed!
3. On a scale from 1 = very poor to 7 = very good, what is **your own level of** knowledge about agrobiodiversity issues in relation to healthy diets in Vietnam?
4. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding **within your institution** on agrobiodiversity issues in relation to healthy diets in Vietnam?
5. On a scale from 1 = not supportive at all to 7 = very supportive, according to you, how supportive to a healthy diet are current agrobiodiversity-related policies in Vietnam? Please provide us with a concrete example (in few words) justifying your response!
6. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on agrobiodiversity in Vietnam shaped and influenced by science and evidence?
7. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on agrobiodiversity in Vietnam shaped and influenced by advocacy and lobbying (by private and/or public actors)?

8. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding of consumers about values of traditional crop varieties and native animal breeds in Vietnam?

Appendix C. Links to data base

The link to [dataset](#) for BASK

Appendix D. Narratives on food system issues related to urbanization

What is the issue?	What is the process/approach proposed to solve/fix the problem? (what is the solution advanced by the KI to solve the problem)	What (technical) tool is proposed to implement the approach	What main goal is being sought?
The lack of awareness of the importance of local market (to convince all different sectors)	Conducting research to show how important the informal market is for the city residents (consumers), migrant vendors and rural producers	The government research institutions conduct research in a neutral position	The government is aware of the importance and find better solutions.
The government having pressure from the retail companies and real estates who have financial power to modernize the city.	The interviewee did not mention about it.		
A lack of alternative solutions to satisfy all demands from different stakeholders. Consumers want to keep informal market for a quick shopping, the government wants to control trading for food safety, vendors want to keep selling their produce on streets.	Widen pavements/side walk so that street vendors can sell their produces and provide safety to those who want to walk streets including elderly and children.	This solution requires collaborative work between Ministry of Trade and Ministry of Construction as well as the municipal government. So far those collaborative work is very difficult in the current government systems which is a vertical administrative system.	
Pollution (air pollution and water pollution) that have been leading to people's distrust of local food.	Raising awareness of children and youth for environmental protection. For example, the book "Cuộc Cách Mạng Một-cộng-rơm" written by Masanobu Fukuoka about natural farming and re-vegetation of desert lands - His book is very influential and there are many people who support his idea. It can be a revolution.	Events: Field trips and study tour for youth and children Social media: Facilitating self-learning opportunities (e.g. books on natural farming and re-vegetation, eco-friendly life)	Individuals' behavior change
Behaviors of city people (busy, no time for cooking, no time for eco-friendly life). Their behaviors support current (negative) urban food systems which are not sustainable, not eco-friendly, not healthy, supporting the big corporations rather than small-scale farmers	Raising awareness of youth for eco-friendly healthy life and eating healthy food	Social media: promoting cycling (good for environment and health) Sharing safe food information	Individuals' behavior change
Urbanization in fact decreasing the capacity of the city to maintain food security due to the imbalance of agriculture and non-agricultural land.	Restricted monitoring processes: In fact, the Master plan (government urban development planning) is good. But it is not implemented properly because the government leaves the implementation to the corporations and don't care/monitor how the plan was implemented.	Establishing law and regulations in the process of urban development (to monitor the implementation process and to restrict urban development). The current system without law and regulations allow interest groups and corporations to act freely based on their own interests.	The balance between farm areas and industrial areas

	Include social development component: which is missing. Corporations do not consider the quality of life of the people who live there.		
Loss of trust for food produced in Vietnam (food safety issues associated with urban pollution and caused by industrial pollution – the fish death in central coast)	Prioritizing environmental issues: When the Homosa fish death in central coast caused a protest, the government started to care environment. Before, they only care economic development.	The same as above	The same as above
Transportations are main problems. There are 30,000- 40,000 daily migrants who come from rural areas to Hanoi to bring their fresh food and animals to sell. They stay in Hanoi from early morning to late night. They are “daily migrants”, causing a lot of traffic issues.		Regulations: restriction of the areas for private motorbike. Infrastructure: increased public transport capacity (city monorail)	The government increases the capacity of public transport systems
Urban farmers who lost their land. Those farmers cannot shift their livelihoods from farming to the service sector.	The government provides compensation money, houses and vocational trainings. (Her emphasis point was that the government is supporting them in right ways but it is farmers’ problem because they do not adapt to the new modern lives.	Urban farmers should adapt to alternative livelihoods in service sector.	Urban residents increase their capacity to adapt to earning incomes from service sectors.
Hanoi city is not evenly developed. Populations and commercial sectors are concentrated into some areas. As a result, some areas were extremely crowded while in other areas, development plan got stuck (infrastructure and public service were not established).	Our comment: the respondent did not mention the solution because she believes that this (imbalanced urbanization) is a natural phenomenon which is uncontrollable. She said that 50% of urbanization is a naturally driven. Also, as mentioned at the beginning, she does not want to say something offensive to her government.		
Limited control of informal food systems in Hanoi	The government still supports traditional market systems as demands are high and decided to preserve local market at least one for each area. (Her emphasis point is that the way the municipal government handles the system is right).	Regulations: all fruit shops should register to the municipal government (this is already introduced on-going regulation change) Infrastructure: The Hanoi government is widening roads to create parking spaces.	Co-existence (both formal and informal systems) but in better controlled ways.
Priority settings (urbanization is a massive subject to address and cannot do everything at the same time)	As long as the government facilitates transportation and economic development, other things (e.g. environmental issues, migration and poverty reduction) can follow later.	Trickle-down effect (the interviewee did not use this word. It is our interpretation)	Modern developed city like Japan.
Urban redevelopment projects got stuck (real estate agencies bought land from the government but do not start developing. There are many empty places or the buildings are completed but no infrastructure and public service).	The government could have controlled. Currently, the government has little power to control it due to their dependency on private sector in terms of financial input.	Not mentioned. Not relevant to his work.	If Urban redevelopment projects are implemented smoothly, retail companies can easily plan to develop a shopping mall there. Without people’s settlement, no planning can be made.

Transportation systems are not well developed. Many roads are narrow and difficult to widen.	The city monorail (planned to open in the end of this year) will be successful. People's behavior will change. In Thailand, Philippines, Malaysia, people now use train. It will take time but Hanoians will also take trains in the future.		Changes in transport from motorbike to public transport
Food safety in informal market systems (lack of control)	<p>If the government wants to ensure food safety, the informal market system is not appropriate but he thinks that informal market system will continue for a while (a decade) but will diminish eventually.</p> <p>He thinks that new young entrepreneur will soon start new forms of retail companies in Vietnam that ensure food safety (perhaps, a small-scale like convenience stores as the initial investment is low).</p> <p>When asked what he thinks about the fact that his company is transforming consumer behaviors from purchasing food in a local market nearby their house to going to a big shopping mall in a peri-urban area in weekend and buy many fresh food there. He said that he is not trying to transform people's behaviors but he believes that along with urbanization, people's life style and value change and more demands on this type of shopping mall.</p>	<p>As a retail corporate, his supermarket follows the regulations provided by the government. The fruits, vegetables, fish and meat sold his supermarket have certificate for safe food (not necessarily organic). He himself visits producers for the final check. With this government regulation, consumers trust commodities in supermarkets.</p> <p>His company uses simple tests to check residual chemicals.</p>	Building trust with consumers. Currently, all of fruits, vegetables and meat/fish are bought via suppliers. (Unlike vincom), his company is not planning to make own farm in Vietnam. Monitoring producers is important. Importing fruits, vegetable and fish from Japan – is a different level - between two countries, involving politics. So he focuses on finding local safe food.
The process of decision-making (in which the influential actors' interests are reflected). Current decision-making process is not open to people, and it is possible for the high level government decision-makers to modify a plan based on their own interests.	Face Book is increasingly getting important for the government to understand what people think. Raising voices	Social media (Face book)	The government uses social media as a means of communication with people (rather than restrict social media like China).
The way benefits are shared among the interest groups (the individual government leaders and big private companies).	Same with above		
People's behaviors. Some people don't follow rules (in transport, small business) and they only think about their own benefit. (He studied in Europe and so he recognizes that Vietnamese people don't follow transport rules such as ignoring traffic lights, driving the opposite lane, selling goods and opening restaurants on permanent, parking cars and motorbikes in inappropriate places.	Education can change. It is difficult for old people to change their behavior but young people can learn and change.		Individual's awareness and behavior change.

<p>The lack of infrastructure. Basic physical systems have not developed. Only clean water is now 95% OK but waste issues, environmental issues, transport (traffic) and so on.</p>	<p>The urbanization is much faster than the government's capacity to respond and people's capacity to adapt (traditional lifestyle and shopping behavior do not change much). As a consequence, many unbalance take place. For example, urban areas were developed by private sector but transport and public services were not ready there. Air pollution and traffic jam are urgent issues but the government cannot respond it yet. The city government cannot handle the issues of undeveloped areas (private sector got stuck and keep the land empty).</p>	<p>"We know very little about the mechanism of urbanization and its (negative) consequences. It is still a challenge for the government to take advantage of the current private-sector driven mechanism for better development".</p>	<p>Physically modernizing the city (infrastructure, public services including waste management and addressing environmental issues.</p>
<p>Despite urbanization is complex issues with an interdisciplinary nature, the responsibility in urban development is assigned to Ministry of Construction alone.</p>	<p>MoC and the central government hardly concerns about agriculture which is the responsibility of Ministry of Agriculture although it is a critical issue in urban areas because how to feed increasing population in the city is a challenge.</p>	<p>Ministries from different discipline working together</p>	<p>Balanced development (not only physical construction but also agriculture)</p>
<p>The lack of capacity for the municipal authorities to implement the urban planning (both human resources and financial resources)</p>	<p>The government is trying to learn from developed countries but they often are not applicable in this context because: 1) the financial capacities are different, 2) the government system is different: more collaboration across Ministries in developed countries to address environment issues.</p>	<p>The law to ensure the standard processes of decision-making related to urban development. This can help city governments.</p>	<p>Quality control in terms of the decision-making processes</p>
<p>Information systems. Sharing information across Ministries have been a challenge. Information on agriculture and transportation come from other Ministries and they are incorporated, interpreted and reflected in policy planning of Ministry of Construction but still not well managed.</p>	<p>This problem has been discussed again and again but never solved. There is no solution so far.</p>	<p>Learning from other countries like Japan</p>	<p>Comprehensive urban planning that addresses the issues of urbanization interdisciplinary</p>
<p>The policy is not addressing the issues comprehensively. MoC focuses on building in urban areas to accommodate increasing population. However, once many people moved to a high-rise building, transportation system stuck. Traffic jam, which is not addressed. Comprehensive planning and implementation are required.</p>	<p>Master plan is excellent. Implementation is problem. For example, universities at city center are causing problems in urban planning. The plan says that universities should move to peri-urban areas. 10 years now, nothing change. When one issue is solved, another issue emerges (trade-off).</p>		<p>Comprehensive implementation and monitoring of implementation.</p>
<p>The gap in the pace of adaptation between urbanization and people's behavior. Supermarkets are ready available but people still want to buy food in local markets.</p>	<p>Supermarkets need to meet the demand of people in terms of the freshness of food and food safety. Many people don't trust vegetables in supermarkets and think that it is better to buy them in local market from their own regular vendors.</p>		<p>Localization of supermarkets rather than westernizing.</p>

In local markets, people can see live chicken live fish. Supermarkets' dead fish and already cut chicken – people never know if they are fresh or not.			
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Appendix E. Narratives on food system issues related to climate change

What is the issue?	What is the process/approach proposed to solve/fix the problem? (what is the solution advanced by the KI to solve the problem)	What (technical) tool is proposed to implement the approach	What main goal is being sought?
Vietnam takes much consideration on adaptation but international community focus more on mitigation	Vietnam tries to harmonise two approaches to dealing with climate change issues by participating in international agreement, getting fund from international donor while gradually balancing between adaptation and mitigation		More balance between adaptation and mitigation
Local authorities do not give high priority to address climate change issues because they think that the issues are not as urgent as other issues (economic dev, income increase...)	Increase awareness of local authorities about climate change issues, especially where are severely affected by climate change. Integrating climate change response into annual socio- economic development plan		Better awareness of local authorities who are the key stakeholders in implementing climate change policy
Many policies have been issued but implementation is poor because of lack of resources and guidance	Take advantages of funding resources from different actors, prepare detailed guideline for local authorities, raise awareness and build capacity of local officials about climate change	Technical manual, guideline	Having funding sources for climate change response activities
The monitoring of policy implementation is weak leading to inefficient implementation of policy	Set up efficient monitoring system of policy from central to local governments, mobilize NGOs, civil society in monitoring of policy implementation	Set up mechanism and welcome comments from NGO, civil society	Good monitoring system will increase efficiency of policy
Climate change has negative impacts on agriculture. Each region has different issues such as sea level in Mekong Delta, drought in Central Highland, flood in Central Coast	In agriculture, transformation of crop varieties, decrease seasons are strategies to cope with climate change. New varieties are researched to adapt to the new environment	Research institutes are mobilized to research new varieties that are able to confront with severe conditions	Adaption to climate change
Climate change policies are mostly at strategic level, and less few detailed policies	Vietnam is still in the early phase of making climate change policies. So in this period, most of policies are made at national level and tackle general issues. The next period will focus on specific issues and specific solutions. The policies will be encouraging and mandatory rather than voluntary as in this period		The policies are detailed enough for local authorities to understand and implement
Because climate change is managed by different ministries, it could lead to the conflict of benefit in given fields	Need good coordination between the ministries, avoid overlapping of functions, works; clarify duties of each ministry	Can be achieved by good planning	Better coordination between ministries (mostly MONRE, MARD, MOIT)
	The national committee on climate change should play well roles in coordinating activities of relating ministries		
There are some conflicts between achieving objectives of climate change and objectives of agriculture development	Encouraging apply technologies, practices that balance the two objectives, for example climate smart agriculture (CSA)		Harmonisation of climate change and agriculture

			development agenda and policies
Climate change has impacted negatively on agriculture production	There are plenty of solutions: - change crops, season, varieties - apply climate smart agriculture - infrastructure construction	- Research new varieties adaptive to climate change context - Study cost-benefit of CSA models to evaluate efficiency and replicate	Mitigate the impacts of climate change on agriculture production
There is no market mechanism in policy implementation to drive practices of relating stakeholders	The government should create market based mechanism, for example in environment-friendly products. Market will drive investment in producing 'green' products		Market-led policy implementation
Vietnam mostly focuses on infrastructure construction to adapt to climate change rather than mitigation	Vietnam will re-orient climate change policies towards mitigation in the next period. Cutting down sources of emission is the key action		
There is no government bodies specifically responsible for climate change at local level as well as no permanent budget for climate change activities	It is difficult to assign a specific body responsible for climate change but the government should allocated a given amount of budget for climate change activities		
Conflict between afforestation and household economic development (for example, in the northern mountain, farmers deplete forest to grow maize)	Protecting forest but at the same time applying techniques in growing maize and other crops under shade can earn income without deforestation (such as H'mong apple)		
Lack of policies encouraging use of regenerate energy and recycle of agriculture residues	The government should issues policies supporting those who invest in clean technology		
Implementation of mitigation policy is difficult because enterprise is the main source of emission but they do not have money to change to clean technology	Vietnam needs policies that clearly allocate amount of emission to specific sector and force enterprises to follow		Mitigation policies are implemented effectively
Lack of coordination at regional level (inter province) to deal with climate change	It is necessary to have inter province coordination mechanism to deal with regional issues	Set up inter province projects or central projects that cover regional issues	Better coordination between provinces to deal with climate change issues
Impacts of climate change are faster and stronger than forecast	Strengthen climate change adaptation strategy, change agricultural production system		Good adaptation to climate change
Lack of human and financial resources for implementation of climate change policies. There is not a budget line for climate change	National budget needs allocate a budget line for climate change.	This needs to be approved by the National Assembly	There is a fixed budget for implementation of climate change policies at local level
Poor cooperation between ministries (MARD, MONRE, MOIT), provinces, regions to address climate change issues	There needs a coordination body at regional level to deal with regional issues.	The government can organize meetings, consortium, and workshops at national and regional levels to recognize the issues and coordinate the related provinces to resolve. Recently, there was a big conference on climate change in	Efficient and joined effort to deal with climate change

		Mekong Delta that tried to tackle the regional issues on climate change	
Many climate change policies have been issued, but there are not detailed guideline on how to implement these policies	Climate change policies are quite vague to many local authorities. Preparation of detailed guideline for policies will help	Technical guideline can be composed by Vietnam Panel on climate change (VPCC) or by the ministries who issue the policies	Local authorities can understand and know what exactly to do
Climate change policies are too dispersive	Need to identify the core policies that need to be done in short term together with resources defined and allocated	Make detailed plan at central level with activities and time of implementation	Concentrate resources on the urgent works
Climate change affects out- migration and therefore reallocating production area and engendering social issues	There are two options: move population to other areas that are able to do agriculture or find the ways to adapt to climate change condition		People are still able to live in your homeland without moving out
Severe impacts of climate change on agricultural production (for example salt water in Mekong Delta) make some areas are not available for agricultural production anymore	Change agricultural production system to the new system that is adaptive to climate change context		
Little contribution from NGOs in climate change policy making process	Need to widen the consultation from NGO during policy making process, not only at later stages but also from shaping ideas of a policy		

Appendix F. Narratives on food system issues related to food safety

What is the issue?	What is the process/approach proposed to solve/fix the problem? (what is the solution advanced by the KI to solve the problem)	What (technical) tool is proposed to implement the approach	What main goal is being sought?
From production to consumption, all stages are related to food safety, while policies related to Food Safety are not clear in some articles. Thus it creates difficulties for enterprises in their business (e.g. articles on branding) and ministries (e.g. unclear responsibilities, overlapping)	The government (in recommendation of MoH) issued the Decree 38/2012 to guide the implementation of some articles of Food Safety Law (responsibilities of ministries are stated) Articles in decree and law should be clear and easy for enterprises to follow. Improve the post-inspection stage of food safety.	Food branding, decentralization in management, etc.	Enterprises are more advantageous in their business Managing institutions are clear in their task Food is sure to be safe
MoH only focuses on officially manufactured food and processed food (considered as areas with less risks of food poisoning) and relax management on street food, food for canteens and industrial zones, therefore, poisoning cases increase	MoIT has applied punishment to units violating food hygiene and safety. Increase the number of authority's officers in MoIT involved to monitor.	Punishment Increase of staff	
Customers are the gods and they should be served the best products. However, due to the unmanageable, a lot of unsafe food are sold in the market, they must be wise consumers to find the best ones in the market.	The government should issue more policies that orient and protect the consumer. Consumer Protection Association should actually protect consumers. Increase awareness and knowledge of consumers in identifying safe food	Television, clubs like women club (meetings to guide on safe food selection). Guidelines on how to identify and choose safe food. This guideline should include images and photos that are arranged in the way easy for understanding	Customers are protected
Unclear regulation system: "Products have been changed according to consumer preference. Most of circulars or decrees (especially related to alcohol, dairy products and starch) was not updated regularly and not suitable to the reality". e.g. "related to dairy products, there were many types of milk sold in the market without detailed description on mixture rate. Or related to alcohol, no clear standards will enable small business to sell unsafe product". It leads to the difficulty in management of MoIT	MoH issued the National technical regulation for fluid milk products in 2010 and National Standards on milk and milk products in 2015. "MoH has just issued National Technical Regulations for fluid milk products and alcohol which will become effective on 1st March 2018 to replace the National technical regulations on milk and alcohol 2010 and technical standards on milk and milk products in 2015 which are not suitable any more. These regulations provided detailed information on all types of milk and alcohol that can be sold in the market."	National Technical Regulations on fluid milk products and alcohol 2010 National Standards on milk and milk products 2015	Clear regulations. Food safety will be ensured.
"Lack of budget to deal with and discard unsafe food and food that are smuggled"	Within 5 years, MoIT has created a large network with many staff at different levels at districts and wards	A large network with many staff at different levels at districts and wards.	Unsafe food will be detected and discarded opportunistically

<p>The lack of budget leads to the lack of personnel in Market Surveillance Agency and the unwell and opportune monitoring and supervision of food in the market.</p>	<p>with a certain budget. These staff are very active in dealing with cases that break the food safety law. Although this amount of budget has been increased compared with 5 years ago, it is still not enough for the Agency to extend their network. Ministry of Finance needs to have policies related to budget in order to ensure activities related to treatment and annulment of unsafe food”</p>	<p>Enough budget and enough personnel and good management.</p>	
<p>The requirement for traceability is impractical and does not ensure that all food is safe. MARD requires that all food businesses (including farming businesses, animal raising businesses, processors, slaughterhouse, specialized shops, etc.) have to provide reliable information for their food origin by using legally sealed invoices, however in the reality many small-scale businesses do not have legally sealed invoices, but normal invoices. This leads part of food businesses to commit a fraud.</p>	<p>Should have clear requirements for traceability (not only based on legally sealed invoices).</p> <p>Develop and promote more safe production models like VietGAP, basicGAP, organic models, etc. Encourage the involvement of non-government organizations/projects because these organizations/projects have large amount of money, good capacity, and clear objectives for safe agriculture.</p> <p>Need to develop a flexible investigation system for traceability by many channels (via telephone, emails, electronic traceability, etc.).</p> <p>Encourage households to join in cooperatives and develop collective brands.</p>	<p>Traceability (via email, telephone, electronic traceability, etc.)</p> <p>Safe production models (VietGAP, Basic GAP, organic production, etc.)</p> <p>A flexible inspection mechanism</p>	<p>Food is ensured to be safe that are good for consumers</p>
<p>Separating the food safety management systems among MARD, MOIT, and MOH is relatively ineffective. Food safety in Vietnam currently uses chain-based management approach. In the food safety law, MARD is responsible for the issues related to the production of fresh food and wholesale markets; MOIT is in charge of retail markets and MOH manages household consumption. This segregation of duties causes inadequacy.</p>	<p>Establish a single agency for food safety management. He gave an example of “Food Safety Management Authority of Ho Chi Minh City”. It belongs to the People’s Committee of Hochiminh city and do the tasks of DoH, DoIT, DARD assigned by MoH, MoIT and MARD</p>		<p>Effective and concentrated policy implementation at provincial/local level</p>
<p>The failure by the Government to fully control the quality of food safety affects the diet. There are many policies, but the inspection mechanism is still not fully implemented.</p>	<ul style="list-style-type: none"> - It is necessary to encourage the awareness of enterprises, producers and consumers in consuming organic food. - Businesses have established the Food Transparency Association (FTA) to facilitate the product traceability and transparency 	<p>VIETGAP</p> <p>PGS (Participatory Guarantee System)</p>	<p>The authority only needs to give incentives, enterprises voluntarily apply.</p>

	<p>- NGOs support farmers by providing some training courses according to some standards such as VIETGAP. They also connect the value chain of food market. Getting a certification from PGS (Participatory Guarantee System) by VECO (now is Rokolto) alone is not sufficient to conclude on the food quality. Farmers should be encouraged to replicate models like VECO.</p> <p>- There is a need to synthesize and integrate food safety management into the chain:</p> <p>+ Businesses: Food might be contaminated in some stages such as circulation where the risk of salmonella and microorganism is high. Thus, risk management should be applied. The World Bank is now proposing the application of risk management and risk communication, focusing on high risk stages.</p> <p>Center of Agrarian System Research and Development CASRAD: It is advisable to put more policy-related activities in action, including participation in policy formulation, reporting on food safety institutions/policies, policy briefs, and researching into safety-related institution networks, developing value chain for food management (both safety and quality concerns).</p>		
The policy on food safety management for canteens or cafeterias (at schools and industrial parks) is still inadequate while the number of eaters is relatively large.	Some preschools have partnered with businesses to provide organic food, then invited parents to involve in controlling the quality		
Lack of adequate food hygiene still happens in small-scale production bases	Applying punishment/penalization to units violating food hygiene and safety	punishment/penalization	
The clearance time via specialized inspections to serve import and export in the food sector takes long time	Each production unit should have the right to publish its own product quality.		To cut down the clearance time
Public opinion does not fully reflect the effectiveness of state management in food safety	Change the public opinion to realize that the policy system has met the management requirement		
The awareness of producers towards laws and their compliance are relatively low	Enhancing the knowledge, practice and awareness of producers on safe and legal production	a better incentive policy on safe production	
Uncomplete policy to control poisoning cases occur in industrial zones due to low-cost diet	New factories be built in industrial parks to provide meals to their workers on the spot.		Avoid long distance transportation affecting on the quality of food for worker in industrial zones

Lacking of knowledge of farmers in using of toxic chemicals and drugs which are banned to use in breeding and cultivating. Farmers use chemicals in their production without knowing whether they are harmful or not	Raise people's awareness on food safety		People themselves have to ask for better product quality
Very difficult to control food safety synchronized from the seed origin to the stage of bringing the product to the market in Vietnam	Planning all small-scale production units and improving their facilities. Build up concentrated and large scale		
Food unsafety is caused not only by producers but also state management agencies because they are unable to control quality of agricultural inputs (pesticide, fertilizer)	Tightening control over quality of agriculture inputs Systemize technical regulations/standards	Inspecting, monitoring Tightening control over issuance of certificate	Better inputs, better food safety situation
One department manages both food safety and quality of agricultural inputs may lead to the fact that management of inputs is considered more important than food safety management	Separate quality management from food safety management, restructure organization of departments under MARD		Quality management is independent with food safety management
The habit of increasing productivity rather than improving quality and sustainability will cause difficulty to food safety management	Production organization towards large scale production and quality first	Land consolidation	Agriculture focuses on quality rather than productivity

Appendix G. Narratives on food system issues related to trade

What is the issue?	What is the process/approach proposed to solve/fix the problem? (what is the solution advanced by the KI to solve the problem)	What (technical) tool is proposed to implement the approach	What main goal is being sought?
<p>Tariff reduction based on regulations of WTO integration process. More import of foreign products → the price reduces. It affects small scale farmers and enterprises especially those who produce sensitive products, including agricultural products like poultry, eggs, etc.</p> <p>The respondent also explained that “in 2006, Vietnam joined the WTO and officially became a member in 2007, followed by a complete trade policy. In order to negotiate the admission to the WTO, from 2001 to 2006, Vietnam has promulgated many laws and documents as well as regulations for the development of trade (both international and domestic trade). For example, laws on intellectual property and anti-dumping legislation, subsidies have been revised. In the process of negotiating and exchanging with other countries until 2014-15, Vietnam must have such laws and the system must be compatible with the WTO.”</p>	<p>“Vietnam has its own roadmap for tariff reduction in each trade agreement after joining WTO. The roadmap is for each group of product.” As this roadmap is negotiable, “the government has tried strong negotiation with WTO to create a suitable roadmap for domestic products which are considered as necessities or sensitive products like agricultural products, poultry eggs, etc.” This is to protect those who produce these products cause if the tariff is reduced too low, the competition will increase.</p>	<p>Not all roadmaps are already fixed, Vietnam take full advantages of space for negotiation. Each country also has its own roadmap for tariff reduction.</p>	<p>Domestic products like agricultural products, poultry eggs, etc. which are considered as necessities or sensitive products will be protected. E.g. Average tariff level for agri products reduces from the current level of 23.5% to 20.9% in 5 – 7 years</p>
<p>Vague current standard and regulation systems on food safety</p> <p>“it is necessary to make standards and regulations more transparent for food safety”. “There are currently not many standards and regulations for food safety as Ministry of Health and MARD have rarely focused on issuing them because they benefit from vague standards and regulations. “If this system is more transparent, the higher level institutions cannot “eat” much money”. Enterprises have to bribe</p>	<p>The national standard and regulation system has been developed and improved with an orientation to the integration process of Vietnam into WTO.</p> <p>“The government has to create pressures on Ministry of Health and MARD to work more on national standard and regulation system so that Ministry of Health has to follow Codex standards done by Vietnam Codex Alimentarius Commission for better standard and regulation system”</p> <p>Our comment: Vietnam Codex Alimentarius Commission is part of Vietnam Food Administration – Ministry of Health.</p>	<p>More strict national standard and regulation system</p>	<p>Transparency without any exchange of money. Food will become safe and consumers will believe in food quality. With the current system, the consumers are still have doubts on</p>
<p>“The government faces pressure to improve domestic trade, especially focus on developing</p>	<p>“Change traditional markets/wet markets into modern markets or trade centers”</p>	<p>Ministry of Industry and Trade (specifically Domestic Market</p>	<p>The retail market has been developed</p>

<p>retail systems to help small and medium domestic enterprises to distribute their produce". The pressure is from the fact that deep integration into WTO will create a lot of challenges and competitions for small and medium domestic enterprises.</p>		<p>Department) and Ministry of Construction has collaborated for this work.</p>	
<p>Open the retail market by allowing 100% foreign capital and owned retailing corporations to open their distribution system according to commitments with WTO but put a limitation on numbers of their branches</p>	<p>"Allowing 100%-foreign capital and owned retailing corporations like Big C, Metrol, Lotte, Aeon, etc. to develop their distribution system in some big cities. However the government also puts a limitation on numbers of their branches." Objectives are (1) "develop a retail market with more high quality imported goods", (2) the government has to limit numbers of branches of foreign-owned corporations "in order to protect Vietnamese retailers like Vingroup, Ocean mart, Fivimart, etc." and "Vietnamese retailers have enough time to learn organizational skills from foreign-owned retailers"</p>	<p>After 2011, 100% foreign capital and owned retailing corporations can open the first retail outlet, but they have to do assessment on market demand by using a mechanism called Economic Need Test – ENT and follow more strict permission if they want to open the second point/retail outlet.</p>	<p>The retail market has been developed. Protection of domestic enterprises</p>
<p>Unclear regulations on brands and trademarks: "Recently the Vietnamese domestic market has strongly been developed with a strong increase of imported as well as domestic commodities. Numbers of shops, business households and vendors has been increasing. Thus numbers of commercial frauds have increased. The management of goods and commodities requires more responsibilities from the MoIT due to unclear regulations of brands and trademarks"</p>	<p>The government has issued documents that specify regulations on brands and trademarks (June 2017 become effective). The regulations are on brands and trademarks for many commodities (including food that are fresh, raw and processed with and without packaging and directly sold to consumers). It also includes regulations on brands and trademarks for agricultural inputs like fertilizers, pesticides, crop varieties, veterinary medicine, etc.</p>	<p>Clearer brands and trademarks</p>	<p>Clearer brands and trademarks</p>
<p>The need of domestic market development in the commitments to integrate WTO Our comment: The respondents meant the weakness of domestic market in the integration of WTO. As they did not use the word "weak", they just mentioned because of the need to develop the domestic market</p>	<p>The government has implemented a lot of measures to improve domestic market, e.g. spending 50 bil. VND is granted for domestic trade promotion activities which encourages Vietnamese people to buy/purchase Vietnamese</p>	<p>Domestic trade promotion activities: "Vietnamese use Vietnamese commodities" campaign. Implement the price stabilization program Our comments: The price stabilization program is the one in which enterprises have to sell their products (mostly food) at lower price in comparison to market</p>	<p>Easier access for consumers to food with stable prices, enabling low-income people to buy essential products</p>

		prices. The gov. compensate the loss for enterprises by giving loans with low interest rate. This will help to develop the domestic market because the program facilitates enterprises. Not all enterprises are allowed to involved, only enterprises who meet requirements of the gov. (e.g. have a large amount of commodities, have standard storage, etc.)	
<p>Instead of free access to foreign market, all private enterprises who want to export rice need to register with Vietnam Food Association (VFA²) whose chairman are VINAFOOD 1 and 2 – 2 state owned companies. Rice exported via these two companies that lead to unfair competition because of the “monopoly in rice export right” by the government.</p> <p>Paddy land in Vietnam is allocated to farmers in small areas. The amount of production each farmer produces is small. In order to increase the quantity and ensure the quality of export rice, the MOIT proposed the government to issue the Decree 109 in 2010 on rice export in which all private enterprises export their rice via state-owned companies.</p>	<p>Currently the government is getting involved strongly in exporting contracts.</p> <p>According to the respondent, the government should not get involved in centralized contracts. The gov. should provide information on rice export, linking enterprises with importing countries and assist enterprises in the negotiating process. The government should act as a representative body for interests of the enterprises.</p> <p>Our comments: Rice exporting state owned enterprises have large market share thanks to governmental contracts (also named centralized contracts). These contracts are normally managed by VFA² and allocate to other members. 2 state owned enterprises like Vinafood I and Vinafood II are leading companies of VFA² and normally the heads of these company are chairman of VFA².</p>	<p>Not involved in centralized contracts</p> <p>Equalization of State Owned Enterprises</p>	<p>Free access for rice exporters</p> <p>Protection of private exporters</p>
<p>Policies to support farmers in rice exporting are inappropriate:</p> <p>“these policies do not really benefit the farmers. The paddy price decreases due to the oversupply. To protect farmers and prevent private enterprises from putting price squeeze on the farmer, the local authorities introduce the paddy floor price is introduced from the beginning of the crop. However, enterprises do not actually buy paddy directly from the farmers, but from the traders. So the farmers are often disadvantageous.”</p>	<p>The paddy price decreases under the market price, the State should provide a loan to farmers to meet their urgent needs and sell paddy when the price increases again.</p> <p>There is a need for the government to have an appropriate mechanism to support farmers and encourage export enterprises to connect with farmers (through input support, technical supply)</p> <p>The government should use its budget to buy paddy from the farmers and keep them in the national storage house. This will avoid the situation of the</p>	<p>A loan to farmers</p> <p>Strict monitoring mechanism for rice procurement between businesses and farmers”</p>	<p>Protection of farmers.</p>

<p>“the government approved the policy of giving loans with low interests to enterprises to buy rice temporarily reserved to help the farmers due to the forecast of excess supply.”</p>	<p>supply over demand. Then, at the suitable time, the government invites enterprises to tender to buy paddy for export.</p>		
<p>Unnecessary Business Conditions create a lot of difficulties for enterprises, impede business operations of enterprises.</p>	<p>Removal of Unnecessary Business Conditions has been discussed and implemented over the past decade, but is still not really effective.</p> <p>Need to review and remove Unnecessary Business Conditions</p>	<p>Review and remove Unnecessary Business Conditions</p>	<p>Protection of enterprises</p>
<p>Many types of fees and taxes create difficulties for farmers and enterprises.</p> <p>Example: Many types of fees and taxes affect an egg today” This is a good example of how fees and taxes affect the goods in animal husbandry area.</p>	<p>reviewing fees and taxes on livestock farmers</p>	<p>reviewing fees and taxes on livestock farmers</p>	<p>Fees and taxes have been removed or reduced</p>
<p>Encouragement of enterprises to invest in agriculture. “Agricultural development is much concerned during this time and agriculture plays an important role in VN while the number of enterprises invest in agriculture is very low. It is because the risk to invest in agriculture is higher than in other fields while the returns are low”</p>	<p>Investment incentives:</p> <p>Land: exempt or reduce taxes for land use</p> <p>Capacity building: training of labor force,</p> <p>Administrative procedure should be simplified, etc.</p>	<p>Investment incentives:</p> <p>Land: exempt or reduce taxes for land use</p> <p>Capacity building: training of labor force, etc.</p>	<p>Enterprises want to invest on agricultural fields</p>
<p>“Livestock raising depends on imported feed sources because feed produced in Vietnam are sold at higher price. Even the price for imported feed are lower than the domestic price. It is still high. In addition importing feed price directly affects domestic production“</p>	<p>The government has issued policies on tax exemption of input material for feedstuffs</p>	<p>Tax exemption</p>	<p>Reduction of cost for livestock farmers, good for animal raisers</p>
<p>Vietnam depends on raw feed imported from abroad which makes hard to control the quality of feed (both imported and domestic feed). Many types of bad quality feed are imported to Vietnam. The regulations on importing of raw feed such as protein powder, meat and bone grinders for livestock are unclear.</p> <p>In addition the origin of domestic feed is unclear.</p>	<p>The respondent suggest more solutions</p> <p>“raw feed such as meat, bone grinders, feed that contain antibiotic etc. should be tighten and must follow technical standards and regulations.</p> <p>Issued licenses for domestic animal feed products to prove the apparent origin</p> <p>When tighten technical standards and regulations, must have a clear mechanism to ensure equitableness amongst different enterprises (e.g. if enterprises do</p>	<p>Clear technical standards and regulations for raw materials</p> <p>License for 50 kinds of antibiotic as veterinary medicine</p>	<p>Quality of feed is ensured and improved that is good for consumers</p>

	not follow technical standards and regulations, they will be strongly punished, etc.)”		
Poultry raising in Vietnam is controlled by foreign large enterprises (like CP Animal Raising Joint Stock Company). This control is in veterinary, feed, technology, distribution systems, etc. These companies hire Vietnamese farmers to raise animals and then sell to Vietnamese traders and consumers at high price → Vietnamese traders and consumers are disadvantageous. These types of companies have a large market share in big urban areas (e.g. Hanoi, Ho Chi Minh, ...	Should have a clear planning for animal raising areas. Should have policies (land use, financial support, etc.) that encourage and enable private enterprise and small-scale raisers. It is very necessary to break the “monopoly” position of foreign large enterprises. Should develop a reliable and public channel to provide market information for all domestic enterprises, traders and animal raisers.	Clear planning for animal raising areas Policies (land use, financial support, etc.) Reliable and public channel to provide market information (via governmental channel,)	Protection of domestic traders and consumers
Lack of local products in the domestic market. The domestic market is not diverse with little presence of typical products of the locality.	“The "One Town has One Product" program is an initiative in Japan and has been implemented in many countries including Thailand. In Vietnam, this program has been applied since 2008 in each period, few places have success such as Quang Ninh, but not in some other places. Many local products (include food products) are promoted. Identify which areas should be given priority to develop and promote local products. This should be done in parallel with high opportunities for market development. The list of indicators (availability of this products, opportunity for production increase, market linkage, etc.) for the selection of areas or local products should be developed. “	The "One Town has One Product" program List of indicators for the selection of areas and products	“Each area has its own special food products, and as a result products are diversified in the market”
“Unclear standards and regulations for food commodities, many exported products (rice, shrimp, fishes, fruits, etc.) that are returned to VN due to not meeting requirements on food safety of importing countries are sold in the domestic market”	“Should have very strict standards and regulations for exported products and also domestic products Increase level for punishment for those who use banned chemicals or overuse of pesticide, etc. for exporting commodities. “	Standards and regulations for exported products and also domestic products	
Asset ownership (specifically land ownership right) for enterprises is unclear. State-owned enterprises are given a priority in asset ownership. Small and medium scale private enterprises (many of them are producing food) have unstable land ownership	Should follow capitalism, ensure the equitableness for both state-owned enterprises and private enterprises (including small and medium ones) in access to business resources (including land).	ensure the equitableness for both state-owned enterprises and private enterprises	Protect small and medium scale private enterprises
“Hidden transaction costs during the operation of enterprises are existing informally. We can	“the Ministries check the costs at the reality not on the paper/policy and have solutions to remove them”	check the costs on the ground	

<p>call them “odd corruption”. E.g. enterprises want to register business, they have to corrupt those who are in charge of this procedure. These kinds of costs are hidden, not decided by any institution but by the society. These kind of transaction costs are common in food chain coz the food safety issue are hot now and food cannot be stored for long time”</p>			
<p>Export policies (especially rice production, shrimp raising) put more attention on quality not quality. The situation happens for a very long time (20 years). These policies were good during the time living standards were not increased and international trade had not been developed. It is not suitable now.</p>	<p>Put more attention on the quality of products</p> <p>The business should be encouraged to upgrade processing facilities, to apply science and technology in production, and to comply with international standards</p>	<p>GAP standards, organic production and sustainable safety, or other international standards such as ISO</p>	<p>Increase of product quality</p>
<p>The domestic market needs to be more developed (including food market) and trading connection amongst agroecological zones needs to be improved. Consumers are now more demanding of food products, however their requirements are not sometimes opportunely meet due to availability of products.</p>	<p>The respondent suggested to maintain existing programs:</p> <p>“Vietnamese use Vietnamese commodities” campaign</p> <p>Projects and programs in which enterprises in the country are linked</p> <p>Organize more trading promotion programs</p> <p>Organize more Vietnamese commodities fairs at provincial district levels</p>		<p>Food products are brought closer to consumers</p>
<p>Due to the effect of inflation, the price (especially for necessities like rice, milk, poultry, pork, egg, etc.) are not stable or increases that affects the poor and low income people. It is necessary to help the poor and low income people have more opportunities to access necessities.</p>	<p>Still implement the price stabilization program but in better ways</p> <p>+ Establish more selling points in the program in industrial zones, and rural areas (e.g. suburban Hanoi), not mainly in supermarkets</p> <p>+ Disseminate info. of selling points in the program to the consumers</p> <p>Our comment: The price stabilization program is the one in which enterprises have to sell their products at lower price in comparison to market prices. The gov. compensate the loss for enterprises by giving loans with low interest rate.</p>		<p>Easier access for consumers to food with stable prices, enabling low-income people to buy essential products</p>
<p>Infrastructure (supermarkets, wet markets, etc.) is not good enough to meet the requirements for distribution/retail systems</p>	<p>Development of modern retailing systems (e.g. modern retailing system like supermarkets, trade centers, online trade, etc.) to gradually replace parts of traditional retailing system (wet market, etc.)</p>	<p>modern retailing systems to replace parts of traditional retailing system</p> <p>enable enterprises to get loan</p> <p>electronic trade (online trade, ...)</p>	<p>Food is easier accessed by consumers,</p> <p>Agro-Producers have many channel to sell their products</p>

	<p>Should attract enterprises (especially big enterprises) to invest on infrastructure. Should enable enterprises to get loan from Bank</p> <p>Improvement of electronic trade (online trade, ...)</p>		
<p>Many unnecessary business conditions create difficulties for enterprises and producers</p>	<p>Review all business conditions and remove unnecessary ones</p> <p>MARD and MoIT cooperative strongly in review all business conditions</p> <p>(two ministries have some overlapping activities and need to cooperate to resolve. The respondent did not answer while being asked about what the overlap is)</p>	<p>Review all business conditions</p>	<p>Enterprises are enabled in doing their business</p>
<p>Encouragement for enterprises to invest in agriculture by the gov. is obstructed by loans, administrative procedure, lack of risk insurance, and unclose linkages amongst 4 parties (enterprises, scientists, farmers, the government). Thus enterprises and farmers are disadvantaged. It is time for the government to think of solutions for this situation</p>	<p>A clear mechanism to closely link 4 parties in a practical way: enterprises, scientists, farmers, the government. Enterprises must be a main party who cooperates with the gov. and scientists to encourage the bank to financially support farmers. Additionally the enterprises advice farmers to organize production oriented to the market demand. This includes value chain development, encouraging farmers to form or act in a cooperative, etc.</p> <p>The government should support enterprises a certain amount of money that is not needed to return. At current time, the government only support enterprises via loans.</p> <p>There needs to have risk insurance for enterprises to invest in agriculture.</p>	<p>Enterprises are main parties</p> <p>Value chain development</p> <p>Cooperative</p> <p>Financial support to enterprises</p> <p>Risk insurance</p>	<p>Enterprises are enabled in their business</p>
<p>"A forest of business conditions is issued by many managing units. There is a lack of one party who has enough strong power to investigate the legality of all business conditions. Therefore a lot of unnecessary business conditions are issues that hinder the business activities of enterprises. In many cases, it takes enterprises 3 months to get all required business conditions. This process especially creates a negative impact on food trading</p>	<p>Should review and cut off unnecessary business conditions</p> <p>Need to assign a party who can monitor the process of issuing business conditions</p>	<p>review and cut off unnecessary business conditions</p> <p>a party who can monitor the process of issuing business conditions and food safety certificates</p>	<p>Enterprises are protected</p>

enterprises. Need to check all business conditions"			
<p>"Changes from agricultural land to non-agricultural land is difficult. Fees for this process are very high and unclear</p> <p>=> A negative impact on those who want to change from agricultural production to food processing "</p>	<p>Regulations on land use must be transparent. It means that land must be considered as a type of commodities.</p>	Transparent land use regulations	Easy changes from agricultural production to food processing
<p>Boundary trading are paid much attention. The government enables boundary uplanders to trade cross the boundary by tax exemption for uplanders in the program named "Boundary citizen program". However, due to lack of control of food quality or product quality in trade in small volume, it is hard to control import product quality (e.g. food like meat, poultry and livestock, fertilizer, pesticide, etc.</p> <p>Our comment Trade in small volume and trade in large volume are two legal trade types. Trade in small volume does not require contracts or quality control and normally done by stallholder farmers, business households, traders living in the uplands. Trade in large volume requires contracts and quality control using technical standard and regulation system. They are done by enterprises (in all types)</p>	<p>"Can still keep it but should:</p> <p>Review and narrow types of commodities that are permitted to be imported via the boundary</p> <p>More close control of those who are beneficiary of this policy"</p> <p>Imported commodities must meet requirements on technical standards and regulations</p> <p>or</p> <p>Removal of "trade in small volume", only keep trade in large volume and through contract"</p>	Requirements on technical standards and regulations	Economic improvement for uplanders
<p>Currently food processing enterprises and small-scale processors are not protected by the government. In addition inspection on food safety management of food processing enterprises are unclear. Therefore there is a need of an organization to be a representative and protect their interests.</p>	<p>Propose to establish an association named "Food Processing Industry Association". This association will be the voice of food processing enterprises and small-scale processors, protect enterprises, and ensure all members to follow food safety standards and regulations.</p>	Food Processing Industry Association	
<p>Lack of technical barriers for imported and domestic products (including food), it is therefore hard to check the quality of products while there are a lot of new products sold in the market</p>	<p>Upgrading the standard and regulation system</p>	The standard and regulation system	Product quality (including food) can be checked easily and ensure food safety
<p>No close collaboration amongst ministries. Two or more ministries (e.g. MARD and MoIT)</p>	<p>Specific assignment/task amongst relevant ministries for the policy to be drafted.</p>	Specific assignment/task for each ministry	Joined policy promulgation

<p>propose different policy/law promulgation to the government for the same issue in agriculture without consulting each other.</p> <p>She took one example to clarify her opinion: Import of chemicals for agricultural production is managed by MoIT while input needs are foreseen by MARD. Specially, pesticide import is permitted by MoIT, however MoIT is not aware of which pesticides should be imported for rice or dragon, for instance. Some of pesticides do not meet requirements of MARD. It affect the farmers in their production.</p>			
<p>The Vietnam Food Association represented by state own enterprises keep the monopoly position in rice export activity. At current time, many private enterprises have enough ability to direct build partnership with foreign companies</p>	<p>Give a right to private enterprises to directly enter the export market</p>		<p>Private sector is more active in rice export</p>

Appendix H. Narratives on food system issues related to agro-biodiversity

What is the issue?	What is the process/approach proposed to solve/fix the problem? (what is the solution advanced by the KI to solve the problem)	What (technical) tool is proposed to implement the approach	What main goal is being sought?
Population growth leading to the different and diversity demand for food, which negatively impacts on precious and wild species	Effectively disseminate and popularization of legal education and strengthening conservation of biodiversity. Strengthen supervision and inspection of law enforcement, strict implementation of sanctions against violations of biodiversity.		
Modern farming practices (using high yielding varieties, continuous intensive farming, land consolidation, etc.) have eliminated native tree species and lost important food sources	The state should provide solutions to produce and consume food sufficiently and safely. Exploitation and sustainable use of natural resources while ensuring the production and consumption of food.		Changing the way in which we use food when biodiversity is diminished; Changing the perceptions, and awareness of society about using natural resource as food
Over use of pesticides, fertilizer with unknown origin in agricultural production; Polluted environment and contamination of water source	<p>Strengthen control over the use and abuse of pesticides and fertilizers in agricultural production</p> <p>Improve agricultural practices in a high-tech manner</p> <p>Consolidation of policy documents and effective management mechanisms for the quality of inputs and outputs in agricultural activities</p> <p>Raise awareness and understanding of people about green agriculture</p> <p>Efficiently carrying out measures to curb the increase of environmental pollution and bad impacts on biodiversity.</p>	Planting in greenhouses, net houses, using bio-products in order to control pest and adverse weather effects.	
After implementing the policies, some overlaps have been identified between policies by MARD and MoNRE For example, incomprehensive policies or do not have policies for biodiversity conservation, as well as people's livelihood.			
Increasing modernization and industrialization as well as importing more industrial breeds, highly productive breeds and forget indigenous breeds/varieties, which leads to decreasing	We will come back to conserve biodiversity by local gene resource, to increase biodiversity and food demand.	we have to invest a lot on them and the investment needs to be comprehensive with high technology and knowledge and the ability to approach market, etc. so	the development is restricted within some scale

<p>biodiversity in agriculture and dietary diversity in human daily meals will be reduced.</p>	<p>Apply the policy to revigorate local endangered gene sources.</p> <p>Policies helping to conserve animals.</p> <p>Ministry of agriculture seems to have some incentives and plans to revigorate a number of local animal gene sources. Those sources can be used to hybridize with industrial breeds to raise the output's productivity</p>	<p>they only develop in small grand to make small income for daily lives</p> <p>revigorate local animals which haven't received much attention compared to those industrial ones. First we have to revigorate them then to use local breeds having comparative productivity as originals to be hybridized with industrial animals and create crossbreds which have both productivity and quality. Better quality for better demand of society.</p>	
<p>The risk of gene modification of genetically modified animals, they may also be a pathogenic factor for humans and may affect food safety. They can spread to other species' habitats or human places then they may bring diseases for local creatures or some environment imbalance.</p>	<p>Conserve the natural ecosystem. For example we can reinforce or establish more natural conservation areas, or those in proper organization, and prepare conditions pertinent to animal's ecological conditions.</p>	<p>Endangered species need to be studied and examined on frequently and we also need to update animal list continually so that we have the ability to conserve them.</p> <p>Establish and reinforce the effectiveness of conservation sites, especially those of pure breeds. If we transfer animals from other place there, we need to set up appropriate ecological sites and climate for them to gradually adapt. That some animals are from significantly remote places makes it hard for u to travel, so we have to transfer them to outside to raise and conserve their species. We need better investment congenial with policies and more investment policies and regulations to upgrade the conservation effectiveness, which one to use and share attentively. Maybe there are some local gene sources that we conserve and exploit, or temporarily use these animals to produce more individuals. If we want to produce like that, we need proper usage methods and more flexible regulations to reduce the stigma.</p>	

Do not properly control raising wild animals providing the food source and re-releasing wild animals (a breeding farm screened for the genetic source, pure of crocodiles and then release them in Cat Tien National Park)	Ministry of Agriculture and Rural Development has provided a list indicating which animals are considered normal and regulate the register procedure to raise animals (in general) to control. The penalty for the violation of the main image and for further breeding, led to the existence of another group of penalties but continued to farm but no chips at all	Chips in raising wild animals to be recognized	Create an alternative food source to reduce the pressure on wild species, reduce the pressure of hunting wild animals
High-tech agriculture with high-production varieties providing cheaper agricultural products, but it is difficult to maintain traditional/indigenous varieties	Find the market for indigenous varieties by constructing value chains	establish trademark and license protection for traditional/indigenous varieties	local breeds are profitable, or they can earn money from those breeds, can make profit, then they would not opt for changing
The awareness of people on biodiversity conservation is limited.	“build conservation areas for plant cultivars of precious seedlings so that after that we can have regulations on the use of local things such as locale For example, if we discover that there are indigenous cultivars that need to be preserved, then we should give responsibility to the unit or agency that preserves the same quarter and until there are rules to exploit how it should all be put should install the system that it is best where there is the native seedlings”		
Intensive agriculture with Imported varieties leading to forgetting indigenous varieties	Research Institute build production model for indigenous varieties together with conservation model The organic and the second on eco agriculture to maintain the indigenous of variety and to keep the diversify the ecology in the farm Ministry of Science and Technology (MoST) has programs that build certification mark, collective label, geographic indications for local products		
Herbicides are used on a large scale that harms not only the plants but also the people and it destroys the natural ecosystem.	Develop the organic and eco agriculture to less use the chemicals on pesticides, fertilizers.		
Agrobiodiversity are not acknowledged to pay attention. Thus, there is no specific policy for agrobiodiversity in VN especially for local level, which can lead to ineffective management on agrobiodiversity (no policy on management of specious species or varieties – local people can sell all varieties if there is a high offer)	A general policy on biodiversity needs to be adjusted into agrobiodiversity and to be tested to fit with Vietnam context. In addition, it is necessary to conduct a big baseline survey on the current situation of agrobiodiversity for	Baseline survey Adjusted agrobiodiversity policy	A specific agrobiodiversity policy fit in VN context

	each VN regional, which can provide a scientific support to adjust the agrobiodiversity policies in VN.		
Conflicts on finance interests/fund distribution/allocation (limited budget) when implementing agrobiodiversity policies or programs on gene resource or science technology conservation	Need to collaborate with or seek for donors to work on a conservation project		
Government seems to be not willing fund for conservation of in situ gene bank	Using fund from specific institutes Propose idea to government to strengthen conservation of in situ gene banks along with ex situ		
Urbanization lead to decreasing agriculture land, Market mechanism (which requires high demand on economic productivity) are leading to transformation in farming practices lead to high-productive varieties and forget local gene resource (indigenous varieties) that can provide high quality of nutrients	Encourage integrating both traditional and modern farming Encourage keep using indigenous varieties in farming practice such as household garden for self-sufficiency, which help guarantee local food security for local people (local people do not need to buy products from other area). Also, we need to link farmers with traders or enterprises who can stimulate the consumption --> create income and profit for farmer Train or develop a communication campaign to improve the awareness of local people on the benefits of agrobiodiversity conservation Transfer GenBank from the central government to the local government, to re-introduce local varieties in the community.	Communication campaign Practice recommendation/encourages Apply model of one town one product project	Keep indigenous varieties Guarantee a self-sufficient food system with enough nutrients -contribute economic value, so household can produce in series local varieties
E. New crops varieties (introduced by government) are not suitable in the local condition (low adaptation, easy to sick, not matched with traditional farming practices) --> they refuse to adopt planting these new varieties -> decrease the agrobiodiversity	Explain clearly or raise awareness for local people about the benefits (supply full information about the nutrition value) of using new varieties; traditional and available varieties in local area. Continue implementing the national strategies on agriculture and nutrition from now on to 2025 and 2030, which propose enriching diet for local people by using diverse varieties and plants with high nutrients.	national strategies on agriculture and nutrition	