Health Externalities in Food Systems: A scoping paper prepared by the International Panel of Experts on Sustainable Food Systems (IPES-Food)

1. Rationale and Definitions: Why health externalities?

In theory, voluntary exchange between two parties in the market is of benefit to both. But the price paid for a good or service often does not adequately reflect the costs and benefits to the society at large of producing or consuming it. When this is the case, economists use the term ‘externality’ to refer to those costs or benefits that are not captured by the market price. These may be negative; for example where a farmer uses chemical pesticides, which leave dangerous residues on the product consumed. Or externalities may be positive; for example where an urban farmer creates attractive green space in the process of growing vegetables for sale. Such externalities may be seen as evidence of what is termed ‘market failure’, meaning that in this instance the market has failed to produce an optimal outcome – from the point of view of society at large. When this occurs, it gives grounds for policy intervention; for example, in the case of pesticides, by government regulation to ban or restrict their use, or by taxing in accordance with a ‘polluter pays’ principle. Such a policy would need to be based on an assessment of the extent of the damage and – where feasible - its cost in money terms. In the case of positive externalities, policies must make explicit (sometimes in monetary terms) the extra social value of such goods. That is, policies to correct for externalities would penalize activities that create negative extra costs to society and properly promote economic activities and products that generate extra social benefits. Such policies would, in all likelihood, be resisted by those with vested interests. This is, therefore, a political issue, and evidence of the existence and extent of externalities will be contested.

Parsing this information in the case of health externalities in food systems is the main task of this report.

While economic theory can be clear on the logic of externalities and the necessity of policy to correct market failures, the political economy of addressing these market failures through policy action can be very complex and challenging. No doubt, prevailing prices favour some groups over others, and any change will affect different sectors of society in different ways. Thus, a political economy analysis can give indications of how different groups may react in supporting or
opposing policies and actions to 'internalize' externalities (i.e. ensure that their real costs and benefits are taken into account). This can be important information in designing public campaigns, education strategies, and advocacy efforts.

It must be noted that market failure cannot be equated to "private sector failure". Market failure is the failure of market interactions to assign the true social value of a good through its price. Hence, private businesses offering sustainable, healthy products are disadvantaged in the marketplace because the market price of their goods cannot capture the full benefits they bring to society. Conversely, private businesses offering unsustainable and unhealthy products are at an unfair advantage, since they don’t bear the full societal cost in their prices.

An analysis of the distribution of the benefits and of the costs in our food systems leads to questions of equity and fairness. Often (although not always) we find that marginalized groups bear a much higher burden of the social costs of a negative externality in our food systems. Thus, for example, economically poor populations (and countries in the Global South) tend to experience greater exposures to toxic agrochemicals than richer groups (and countries in the Global North). But the correction of externalities can also lead to results (such as higher prices for food products) that can heighten inequalities, if care is not taken to address them. It may therefore be necessary not only to correct for externalities as just described but also to adopt equity as an explicit criterion for the development of appropriate policies.

Following this logic, government policies and programmes would modify markets and food environments to reduce the effects of negative externalities and enhance those of positive externalities. In the case of negative health externalities, the market price for a particular food product would be lower than it should be to reflect its full cost to society. An example would be the health consequences (skin lesions, respiratory problems, cancers, miscarriages and birth defects) of high levels of toxic agrochemicals used in banana production in many areas of Latin America. The price of these bananas, sold in supermarkets around the world, do not reflect the extra health costs borne not only by the workers in banana plantations, but also by other members of their families, and their communities.

In the case of positive health externalities, the market price for a particular food product would be lower than it should be to reflect its value (benefit) to society. When external benefits are not
internalized, we may produce and consume less of the product than is good for us (collectively). To correct for such a situation potentially requires different policy measures (e.g. subsidies to the consumer, the producer, or both; or public provision).

This report reflects IPES-Food’s focus on sustainable food systems as a whole. Food systems are suffering from a form of endemic market failure whereby the costs of achieving specific narrowly-defined goals are externalized in terms of negative outcomes elsewhere. As such, the production of large volumes of crop commodities for global markets may satisfy some visions of food security, but doing so increasingly entails a series of costly and damaging social and environmental impacts – and even threatens long-term crop productivity itself. A food systems approach looks holistically at all of these outcomes. It treats seemingly disparate problems, from land evictions in the global South to food marketing standards in the global North, as interconnected and mutually reinforcing ones, and as the component parts of systemic problems underlying the way food is produced, processed, distributed and consumed around the world. As such, a systems approach allows us to resist the temptation to compartmentalize the problems, or to pursue one goal (e.g. increased food production) at the expense of another (e.g. ecosystem protection, public health or social equity). Taking a systems approach does not preclude detailed analysis of specific parts of food systems. Indeed, by zooming in on specific entry points (in this case health impacts/externalities), IPES-Food is able to build detailed analysis of the component parts of food systems, to identify what must occur at each of these points, and in what sequence, in order to spark a transition, supported by the creation of synergies across the food system and beyond to truly sustainable food systems.

Food systems are also suffering from policy failures whereby government action, rather than increasing efficiency and equity, often exacerbates social, environmental and health costs; whereby policy privileges those generating negative externalities and disadvantage those (businesses and consumers) providing extra social benefits through their actions. Thus, a market failure framework of food systems suggests not only the need for new policy to transform them, but also the abolition of old and entrenched policies, which have promoted inequality, unhealthiness, and environmental destruction.

The focus on political economy in this scoping paper reinforces the holistic view of food systems. A holistic view of food systems allows leverage points for systemic change to be identified. However, simply pulling on these levers may not suffice when powerful actors are lined up to
defend their stake in current food systems. The various components of food systems (e.g. trade policies and agricultural subsidies) have co-evolved over time so as to become mutually reinforcing, meaning that powerful coalitions of interest have evolved alongside them. It is therefore necessary to identify the interests at play, and to focus on the science-policy process as much as the policy options themselves. In this way, solutions can be sought that are truly capable of unblocking these systems.

2. Sources of Negative Health Externalities in Food Systems

Sources of negative health externalities can be found in all areas of food systems: production, distribution, and consumption. Important suspected sources of negative health externalities include pesticide/herbicide toxic exposure through air, water and food (leading to some forms of cancer, allergies, sterility, etc); preventive antibiotic use in livestock (leading to human antibiotic resistance); endocrine disruptor chemicals (affecting hormone function and infant development); undernutrition (leading to lower productivity, reduced life expectancy, and increased vulnerability to infectious diseases); unsafe food handling (leading to foodborne illnesses); obesogenic diets (leading to obesity and associated non-communicable diseases, such as diabetes and heart diseases); and cancer-causing diets.