

# **M.E.S.I.A. Framework**

## Environment Section

### 1. Environmental Impact of the Institute 0/0.5/1

- a. What are the possible environmental factors that come into play when setting up and running the farm? Such as but not limited to:
  - i. Land usage
  - ii. Air pollution
  - iii. Noise pollution (for nearby communities)
- b. Do consumables such as fertilizers produce wastes that are easily disintegrated or recycled? Will the discharge affect surrounding ecosystems?
  - i. Are effects of agrochemicals nonexistent or as minimal as possible?
  - ii. Is discharge water treated so that fertilizer runoff that may cause eutrophication in rivers and oceans is reduced?
- c. Are waste produced in the farm processes properly recycled and disposed of?
  - i. Follow the general 3R (reduce, reuse, recycle) rule?
  - ii. Volume of waste is minimal as possible to not strain landfills (especially in Hong Kong)?

### 2. Flux of Carbon Footprint Caused by the Institute 0/0.5/1

- a. What sort of effort does the farm make to reduce the carbon footprint caused by its processes? Fields such as but not limited to:
  - i. Environmentally friendly packaging
  - ii. Automated systems
  - iii. Electricity usage
- b. Carbon footprint may also be attributed to labor (especially manual labor), how is this maintained by the institute?
  - i. Reduction in manual labor to control from long distance
  - ii. Farms are automated to decrease dependency of physical labor

- c. Carbon footprint is also attributed to transport of goods. How does the institute minimize carbon footprint caused by transport?
  - i. Preferring to compete in markets that are closer to the farm – local market over further ones
  - ii. Transportation is as environmentally friendly as possible (electrical vehicles may be a possibility?)

**3. Addressing Farm Hygiene and Produced Food Safety 0/0.5/1**

- a. How is the safety of the produced goods monitored?
  - i. Government involvement (AFCD certification)?
- b. Especially for urban agricultural institutes, can the produced goods be considered organic (organic certification provided by Muto World's separate set of analyses)?
  - i. Dependent on analyses results
- c. Are infestations (rats, cockroaches, and other pests) common? How are they dealt with?
  - i. Are chemicals used safe (for what I am not sure yet)?
- d. Are pesticides and herbicides used for the purposes of agriculture, and if they are, are they organic (safe/easily biodegraded) or not?
  - i. (Dangers of pesticide and herbicide should be addressed here)

**4. Contribution to Food Security (both on local/non-local scale) 0/0.5/1**

- a. How much food is being produced?
  - i. Unit per area
  - ii. unit per time
  - iii. unit per other resources used to maintain the farm (labor / costs / etc.)
- b. What percentage of the produced food goes to local markets? What percentage is included in exports?
  - i. Higher advantage (points) towards locally predominant institutes

c. Is there variation of foods produced in the institute? Mono-farming is discouraged due to reasons such as:

i. More vulnerable to pests and disease (see bananas and potatoes as good examples)

ii. Fertility loss in soil (certain nutrients are taken up by certain crops – monoculture may lead to lack of that nutrient in the soil/medium)

iii. Biodiversity decrease (breeding one subspecies of crop may lead to lack of biodiversity of that species e.g.: bananas)

**5. Institute's Alignment with UNSDG goals 0/0.5/1**

a. Goal 2: Zero Hunger

b. Goal 9: Industry, Innovation, and Infrastructure

c. Goal 11: Sustainable Cities and Communities

d. Goal 12: Responsible Consumption and Production

e. Goal 13: Climate Action

**Social (Intra- and Inter-Institutional Interactions) Section**

**1. Allocation of Human Capital in the Institute 0/0.5/1**

a. How is human resources being used in the institute?

i. Is the allocated human resource necessary, or are there alternatives?

ii. Work is distributed amongst employees to best fit their talents and skills, instead of blind assignments.

iii. Employees are encouraged to constantly develop their skills whilst working on projects in the institute not only for company advantages but also for personal development.

**2. Relationship of the Institute with its Stakeholders 0/0.5/1**

a. What is the relationship of the institute with its stakeholder like?

b. Does the institute make any effort to improve their relationship?

c. Can this be cross-checked with the stakeholders for verification?

**3. Relationship of the Institute with its Community 0/0.5/1**

- a. Does the farm provide any service for its community?
  - i. Accepting volunteers for agricultural experience?
  - ii. Providing food and other commodities for people in need of help?
  - iii. ????
- b. Does the institute make any effort to improve their relationship?
- c. Cross-checked within communities for verification?

**4. Job Creation and management of this institute 0/0.5/1**

- a. How often does this farm hire people?
- b. Are the hires local or non-local?
- c. Are the jobs stable in this institution?

**5. Social Equality Expectations of this Institute 0/0.5/1**

- a. Does this farm adhere to modern social equality and social equity agendas?
  - i. Gender equality
  - ii. Non-ageism
  - iii. No discrimination against differently abled individuals
- b. Does race play an important factor for decision making in processes of the institute?

**Institute Governance Section**

**1. Basic Business Ethics of the Institute 0/0.5/1**

- a. Are basic business ethics upheld in the working environment? Some counterexamples as follows:
  - i. Unsafe working conditions
  - ii. Insufficient emergency exits

- iii. No delayal in payments/salaries
    - iv. And other ethical issues that may arise in businesses
  - b. Are inter-business trades clean and transparent?
    - i. Possible bribery?
    - ii. How are the numbers of trades being kept? (Does an official accountant or accounting department preside within the institute?)

2. **Effect of Corporate Governance on the Operation as a Whole 0/0.5/1**

- a. Are rules, policies, company practices, etc. that guide the board (or higher-level management) is transparent, accountable, and secure?

3. **Is Efficiency of Work Prioritized in the Institute? 0/0.5/1**

- a. Work is carried out in efficient manner – no misunderstandings and contradictions between upper and lower management as well as junior employees.

4. **How is Staff Welfare Managed in the Institute? 0/0.5/1**

- a. Efforts are made to make employees feel valued at the company, such as
  - i. Health insurance
  - ii. Paid vacations
  - iii. Accommodation for unhoused staff members
  - iv. Transportation fees

5. **Higher Management Involvement in Institute Processes and Projects 0/0.5/1**

- a. Management is involved in project development within the institute
- b. Management is aware of direction and definition
- c. Leadership skills are allocated properly in projects and events that necessitate them, initiated by management.
- d. Management is able to take care of internal conflicts.