Version	Variable type	Namespace	Domain	Concept	Variable	Unit or Category	Description
v0							Initial (bootstrap) version. The assemblage of plant species
v0	vegetation	,					and the ground cover they provide. Commonly used vegetation such
v0 v0	vegetation vegetation	base	agriculture				as frequently used plants. Commonly used vegetation in
			- C				A living organism of the kind ex emplified by trees, shrubs, herbs
v0	vegetation	base	agriculture	Plant			grasses, ferns, and mosses, typically growing in a permanent site, absorbing water and in-
•	vegetation	Subc	agriculture				organic substances through its roots, and synthesizing nutrients in its leaves by photosynthesis
							using the green pigment chlorophyll. A plant population/varietal
v0	vegetation	base	agriculture	Plant	PlantSpecies	Categorical	whose evolution in a project is represented by one or more models.
v0	shock						The external effects that influence lots, e.g. sun, rain, snow frost,
v0	shock	base					Commonly used shocks. The domain aiming to predict
v0	shock	base	meteorology				the state of the atmosphere at a particular place and time, e.g heat, cloudiness, dryness, sun-
							shine, wind, rain, etc The state of the atmosphere at a particular place and time as re-
v0	shock	base	meteorology	Weather			gards heat, cloudiness, dryness, sunshine, wind, rain, etc
v0	shock	base	meteorology	Weather	WeatherCondition	Categorical	The variable representing the whether condition at a particular place and time.
v0	measurement						Also known as observations, a measurement is the action of measuring quantity in the world.
v0 v0	measurement	base	agriculture				Commonly used measurements. Commonly used measurements
v0	measurement	base	agriculture	PlantHeight			in agriculture. The plant height is the vertical size of a plant.
v0	measurement	base	agriculture	PlantHeight	HempHeight	Continuous	The variable representing the hemp height at a particular time
v0	measurement	base	agriculture	PlantHeight	AlfalfaHeight	Continuous	The variable representing the al- falfa height at a particular time.
v0	measurement	base	agriculture	Yield			The crop yields which is the harvested production per unit of harvested area for crop products
v0	measurement	base	agriculture	Yield	HempYield	Continuous	The variable representing the hemp yield gathered during harvest.
v0	measurement	base	agriculture	Yield	AlfalfaYield	Continuous	The variable representing the al- falfa yield gathered during har-
v0	measurement	base	agriculture	PlantDensity			The plant density is the number of individual plants present per
v0	measurement	base	agriculture	PlantDensity	HempDensity	Continuous	unit of ground area. The variable representing the hemp density per unit of ground
	measurement	Dasc					area. The variable representing the al-
v0	measurement	base	agriculture	PlantDensity	AlfalfaDensity	Continuous	falfa density per unit of ground area. Also known as actions, treat-
v0 v0	intervention	base					ments or practices. Commonly used interventions.
v0	intervention	base	agriculture				Commonly used interventions in agriculture.
v0	intervention	base	agriculture	Harvest	T		The process of gathering in crops. The variable representing the
v0	intervention	base	agriculture	Harvest	HarvestCrops	Categorical	kind of crops to harvest. Tillage is the agricultural preparation of soil by mechanical agi-
v0	intervention	base	agriculture	Tillage			tation of son by mechanical agretation of various types, such as digging, stirring, and overturning.
v0	intervention	base	agriculture	Tillage	TillageSoil	Boolean	The variable representing whether tillage is performed.
v0	intervention	base	agriculture	Herbicide			A substance that is toxic to plants, used to destroy unwanted vegetation.
v0	intervention	base	agriculture	Herbicide	SpreadHerbicide	Boolean	The variable representing whether to spread the herbicide on the unwanted vegetation.
v0	intervention	base	agriculture	Pesticide			A substance used for destroying insects or other organisms harm-
			o o				ful to cultivated plants or to animals. The variable representing
v0	intervention	base	agriculture	Pesticide	SpreadPesticide	Boolean	whether to spread the pesticide on the crops. Rhizobacteria infect host plant
v0	intervention	base	agriculture	Rhizobacteria			root nodules and offer plants access to increased levels of nitrogen and new evidence suggests
							they could have protective qualities against diseases and pests.
v0	intervention	base	agriculture	Rhizobacteria	UseRhizobacteria	Boolean	The variable representing whether to use Rhizobacteria on the soil.
v0	intervention	base	agriculture	AlfalfaCompost			Compost made from alfalfa and other plant material and is rich in nitrogen and proteins.
v0	intervention	base	agriculture	AlfalfaCompost	UseAlfalfaCompost	Boolean	The variable representing whether to use AlfalfaCompost on the soil.
							Biochar is black carbon produced from biomass sources for the pur-
v0	intervention	base	agriculture	BioChar			pose of transforming the biomass carbon into a more stable form (carbon sequestration).
v0	intervention	base	agriculture	BioChar	UseBioChar	Boolean	The variable representing whether to use BioChar on the soil.
v0	intervention	base	agriculture	Planting			The act of setting seeds into the ground to grow a collection of plants.
v0	intervention	base	agriculture	Planting	PlantingSeeds	Categorical	The variable representing the kind of seeds to plant.
v0	intervention	base	agriculture	Pruning			Pruning is the removal of plant parts like branches, buds, or roots for plant growth.
v0	intervention	base	agriculture	Pruning	PruneCrops	Boolean	The variable representing whether to prune the crops.
VΩ	intowent:	haco	amioul+	VormiC			Vermicompost is known to improve many crop yields and quality. Vermicompost has high
v0	intervention	base	agriculture	VermiCompost			porosity and improves aeration drainage, water-holding capacity and microbial activity.
v0	intervention	base	agriculture	VermiCompost	UseVermiCompost	Boolean	The variable representing whether to use VermiCompost on the soil.
v0	intervention	base	agriculture	CowManure			Cow manure is rich in nutrients and has an approximately 3:2:1 ratio of NPK.
v0	intervention	base	agriculture	CowManure	UseCowManure	Boolean	The variable representing whether to use CowManure or
v0	intervention	base	agriculture	Irrigation			the soil. The supply of water to land or crops to help growth, typically
v0	intervention	base	agriculture	Irrigation	IrrigateCrops	Boolean	by means of channels. The variable representing
v0	intervention	base	agriculture	Fertilizer		Doorcan	whether to irrigate the crops. A chemical or natural substance added to soil or land to increase
v0	intervention	base	agriculture	Fertilizer	FertilizeSoil	Boolean	its fertility. The variable representing
							whether to fertilize the soil. Mycorrhizae are fungi that form mutually beneficial relationships
v0	intervention	base	agriculture	Mycorrhizae			with plants. They can improve plant access to nutrients, nutri- ent uptake rate, and improve
							crop value metrics like yield and quality. The variable representing
v0	intervention	base	agriculture	Mycorrhizae	UseMycorrhizae	Boolean	whether to use Mycorrhizae of the soil.