

Supplier	Input	Process		Output (or result)	Customers
		Sub-process	Determining factors		
Sun; soil	Sunlight; groundwater	Germination (once only)	Temperature, time (day length) and water supply	Sprouting seeds	Tree
Sun; atmosphere; soil (aided by fungi and bacteria)	Sunlight; CO ₂ ; groundwater; chemicals from soil	Growth (repeated)	Light, carbon dioxide, water and chemicals	Thickening and lengthening of trunk, production of leaves, etc. O ₂ exported in day; CO ₂ at night Dead leaves dropped in autumn (contribute to Decay process)	Tree
Sun; soil	Sunlight; groundwater	Flowering (repeated)	Time (day length) and water supply	Pollinator attractors, giving out scent and visual signals	Tree
Pollinators (mainly insects, esp. honey-bees)	Pollen from other apple trees	Pollination (repeated)	Season of year + openness of flowers	Nectar collected by pollinators Own pollen exported Fertilised ovules, needed for fruit production	Tree
Sun; soil	Sunlight; groundwater	Ripening (repeated)	Temperature, time and water supply	Fruit Ethylene gas (promotes ripening in other, nearby fruits)	Tree
Birds and mammals (including man)	Semi-digestion of seeds	Dispersal (repeated; outside process)	Luck, in the wild. Commercial decision in cultivation	Falling fruits made available to outside agents Viable seed deposited on ground	Tree and its offspring
Fungi, worms, beetles, bacteria, etc.	Recycling of tree's constituents	Decay (once only; stops all other sub-processes)	Age and health	Dead wood (food and raw material for recyclers)	Recyclers Other plants and trees