

There is a diverse range of business sizes and management styles for agriculture in Tokyo due to the different natural and social conditions such as islands, hilly and mountainous areas, and urban areas, etc.

Therefore, to promote agriculture, it is desirable to promote the regional characteristics and to design and develop stable and attractive management appropriate to the differences.

Accordingly, based on actual agricultural business examples in each area in Tokyo, business models categorized by targeted agricultural income are exemplified for utilization as indices in preparing agricultural promotion plans in each municipality and in setting management improvement targets of farmers.

## 1

### Setting business models

Business models categorized by agricultural income are set by the management foundation, social conditions of the area, and the age of the human resource, etc.

- ① Target income 10 million yen : Full-time farmer business model for leading agriculture in Tokyo
- ② Target income 6 million yen : Business model for bearing agriculture in the area
- ③ Target income 3 million yen : Business model for supporting an expanse of agriculture

Also, the next model is set for large-scale agricultural management bodies and business management bodies such as corporations, etc. that introduce an employed work force.

- ④ Sales target 50 million yen and above: Business model for corporations.

※ 1) The management style is based on the family run business.

※ 2) The target annual work hours for each main worker is set to approximately 1,800 hours by actively facilitating agricultural labor saving efforts from the point of view of health and leisure time.

## 2

## Exemplification of Business Models

### (1) Business model for leading agriculture in Tokyo (target income : 10 million yen)

This model adopts a predetermined employed work force and aims to use agricultural management as driving force of agriculture in Tokyo as a central hub.

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
1	Vegetables	I	Management featuring direct sales of vegetables grown in both a greenhouse and outdoors	120 (Facility 40) 180	3 + employee 1	Tomato, cucumber, sweet corn, broccoli, carrot, cabbage, etc.	Agriculture Greenhouses, heating unit, and precooling chamber
2	Vegetables	II	Management mainly composed of marketing and contracted shipping of vegetables grown outdoors and in a greenhouse	180 (Facility 20) 360	3 + employee 1	Daikon radish, cabbage, spinach, Japanese mustard spinach, tomato, broccoli, etc.	Agriculture Greenhouses, precooling chamber, seed mulcher, transplanting machine, and vegetable washer
3	Vegetables	II	Management mainly for marketing and shipping of school lunches, specializing in Japanese mustard spinach	50 (Facility 40) 300	3 + employee 1	Japanese mustard spinach	Agriculture Greenhouses, precooling chamber, and vegetable washer
4	Vegetables	II	Management by combining marketing and contracted shipping of mainly vegetables grown in a greenhouse	150 (Facility 30) 375	3 + employee 1	Spinach, Japanese mustard spinach, potherb mustard, carrot, etc.	Agriculture Greenhouses, precooling chamber, and vegetable washer
5	Flowers	I II	Management featuring direct sales and marketing of potted flowers	45 (Facility 45) 90	3 + employee 2	Potted flowers such as cyclamen and poinsettia, etc.	Agriculture Greenhouses, heating unit, clod crusher, and potting machine
6	Flowers	II	Management mainly composed of marketing and contracted shipping of flower bed seedlings and potted flowers	70 (Facility 30) 120	3 + employee 2	Flower bed seedlings, potted flowers, and vegetable seedlings	Agriculture Greenhouses, heating unit, automatic irrigation systems, seeding machine, wheel loader, soil mixer for pots, and storage space for soil for horticulture
7	Flowers	II	Management by marketing of Eurya japonica	250 (Facility 0) 250	3 + employee 1	Eurya japonica	Speed sprayer, back hoe, and carrier
8	Fruits	I	Management featuring fruits, introducing restricted root zone cultivation system for Japanese pears and grapes	80 (Facility 20) 80	2 + employee 3	Grapes, Japanese pear	Agriculture Greenhouses, speed sprayer, chemical proof shutter, fruit trellis, and restricted root zone cultivation system
9	Potted plants	II	Management of producing trees for urban tree plantation	240 (Facility 2) 240	3	Tall deciduous trees, general shrubs, and general shorter trees	Raising seedling house, truck with crane, and back hoe
10	Potted plants	II	Management by producing ground cover plants and container potted shrubs, etc.	300 (Facility 100) 300	4 + employee 3	Ground cover plants and shrubs in general	Steel frame greenhouse, automatic irrigation systems, wheel loader, and fork lift
11	Animal husbandry	II	Management of breeding high performance dairy herds utilizing self-supplying feed, and producing and selling manure	400 40 cows (delivered cows)	2 + employee 0.5	Raw milk and manure	Cattle barn, automatic feeding machine, milker, bulk cooler, manure handling and disposing shed, wheel loader, and coarse feed cultivation machinery

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12	Animal husbandry	II	Management by combining the production of egg-laying hens and Tokyo Shamo chickens	30 3,000 hens (egg-laying hens) 1,000 chickens (Tokyo Shamo chickens)	2 + employee 1	Chicken eggs, Tokyo Shamo chickens, and fermented chicken manure	Poultry house, brooding house, manure handling and disposing shed, wheel loader, and direct sales facility
13	Animal husbandry	III	Management by combining dairy farming and direct sales of home-made dairy products	50 20 cows (delivered cows)	2 + employee 0.5	Raw milk, dairy products, and barnyard manure	Cattle barn, milker, bulk cooler, automatic feeding machine, manure handling and disposing shed, wheel loader, and facility for processing and selling milk
14	Combined	I	Management featuring protected horticulture mainly taking care of passion fruits	40 (Facility 30) 40	2 + employee 1	Passion fruit, mango, lemon, tomato, etc.	Agriculture Greenhouses and fruit trellis

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## (2) Business model for bearing agriculture in the area (target income : 6 million yen)

This model enhances agricultural management by introducing family labor power and employed work force as required, and planning to improve market channel, etc. effectively utilizing agricultural land and facilities, etc.

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
1	Vegetables	I	Management mainly composed of direct sales and contracted shipping of vegetables grown in a greenhouse	50 (Facility 40) 250	3	Tomato, cucumber, spinach, Japanese mustard spinach, Edo-Tokyo vegetables, etc.	Agriculture Greenhouses, heating unit, and precooling chamber
2	Vegetables	I	Management featuring vegetables, by shipping to a variety of partners, such as cooperative direct sales stores, direct spot sale stores, mass retailers, and schools for school lunches, etc.	60 (Facility 20) 120	3	Tomato, cucumber, kidney beans, leaf and stem vegetables, sweet corn, daikon radish, etc.	Agriculture Greenhouses, heating unit, precooling chamber, and direct sales facility
3	Vegetables	I II	Management featuring contract and direct sales of mainly tomatoes produced by hydroponic culture	50 (Facility 30) 60	3 + employee 1	Tomato, cucumber	Agriculture Greenhouses, hydroponic culture facility, heating unit, and heat pump
4	Vegetables	II	Management featuring marketing of mainly leaf vegetables such as Japanese mustard spinach and spinach, etc.	50 (Facility 40) 250	2	Japanese mustard spinach, spinach, edamame soybeans	Agriculture Greenhouses, precooling chamber, and vegetable washer
5	Vegetables	II	Management mainly composed of marketing and shipping for school lunches, specializing in Japanese mustard spinach	40 (Facility 30) 180	2	Japanese mustard spinach	Agriculture Greenhouses, precooling chamber, and vegetable washer
6	Vegetables	II	Management mainly composed of marketing Japanese mustard spinach and edamame soybeans	60 (Facility 30) 240	2	Japanese mustard spinach, edamame soybeans	Agriculture Greenhouses, precooling chamber, and vegetable washer
7	Vegetables	II	Management featuring marketing of mainly leaves and flowers for decorating Japanese dishes	30 (Facility 20) 80	3	Decorative leaves and flowers for culinary use	Agriculture Greenhouses, precooling chamber, and packing control facility
8	Vegetables	II	Management mainly composed of marketing vegetables grown outdoors	12 (Facility 0) 240	3	Cabbage, broccoli, daikon radish, spinach, carrot, etc.	Transplanting machine, precooling chamber, and washer
9	Vegetables	II	Management featuring direct sales and marketing of vegetables	80 (Facility 20) 160	3 + employee 0.5	Tomato, cucumber, Japanese mustard spinach, spinach, daikon radish, etc.	Agriculture Greenhouses, heating unit, precooling chamber, and vegetable washer
10	Vegetables	II	Management featuring ashitaba mainly for processing	200 (Facility 0) 200	2	Ashitaba	Back hoe
11	Vegetables	III	Management mainly composed of producing, processing and selling wasabi horseradish	50 (Facility 2) 50	2	Wasabi horseradish and processed products	Raising seedling house, processing facility and selling facility
12	Vegetables	III	Management by combining direct sales of vegetables and processing and sales of farm products	80 (Facility 20) 120	2 + employee 1	Tomato, eggplant, cucumber, daikon radish, taro and processed products (confectionery and daily dishes)	Agriculture Greenhouses, heating unit, precooling chamber, processing facility and selling facility
13	Vegetables	IV	Management mainly composed of operating a garden for experiencing farm work and direct sales of vegetables	65 (Facility 10) 900	3	Tomato, cucumber, cabbage, spinach, etc.	Agriculture Greenhouses and farm work experiencing facility
14	Flowers	I	Management by combining direct sales and marketing of flowers	50 (Facility 30) 120	2 + employee 1	Pot flowers (cyclamens, etc.), flower bed seedlings and vegetable seedlings	Agriculture Greenhouses, heating unit, automatic irrigation systems, culture soil disinfecting machine, wheel loader, potting machine, and seeding machine

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
15	Flowers	I	Management mainly composed of shipping chiefly cut flowers to cooperative direct sales stores and mass retailers	60 (Facility 40) 120	4 + employee 1	Lily, malcolm stock, aster, Russell prairie gentian, and other cut flowers	Agriculture Greenhouses, precooling chamber, and automatic liquid fertilizer mixing machine
16	Flowers	II	Management mainly composed of marketing pot flowers and flower bed seedlings	80 (Facility 20) 160	2 + employee 0.5	Pot flowers and flower bed seedlings	Agriculture Greenhouses, heating unit, automatic irrigation systems, culture soil disinfecting machine, wheel loader, potting machine, and seeding machine
17	Flowers	II	Management by marketing cut flowers	60 (Facility 60) 60	2	Rose	Agriculture Greenhouses, heating unit, nutritious liquid supplying apparatus, and precooling chamber
18	Flowers	II	Management mainly composed of marketing bouvardia	100 (Facility 50) 100	2	Bouvardia, Fleesia, Aspidistra elatior, etc.	Agriculture Greenhouses, precooling chamber, and wheel loader
19	Flowers	II	Management by marketing Phoenix spp. (cut leaves) (both grown outdoors and in a greenhouse)	140 (Facility 40) 140	2	Phoenix spp.	Net greenhouse
20	Flowers	II	Management by marketing cut leaves	30 (Facility 30) 30	2	Leather fern, ruscus, dianella, etc.	Agriculture Greenhouses
21	Flowers	II	Management by marketing Eurya japonica	100 (Facility 0) 100	2	Eurya japonica	Carrier
22	Flowers	II	Management by marketing ornamental pot flowers	100 (Facility 50) 100	2	Phoenix spp., kinds of Dwarf schefflera, Ficus, and palm coconut	Agriculture Greenhouses and net greenhouse
23	Fruits	I	Management featuring fruits, by mainly producing grapes grown in a greenhouse	50 (Facility 20) 50	2	Grape, pear	Agriculture Greenhouses, speed sprayer, chemical proof shutter, fruits trellis, and restricted root zone cultivation system
24	Fruits	I	Management featuring fruits, by mainly producing Japanese pears and grapes	80 (Facility 0) 80	2 + employee 0.5	Pear, grape, kiwi fruit, etc.	Speed sprayer, swing sprinkler, fruits trellis, chemical proof shutter, and rooting zone control cultivation system
25	Fruits	I	Management featuring fruits, by mainly producing kiwi fruits	80 (Facility 10) 80	3	kiwi fruit, grape, persimmons, etc.	Speed sprayer, fruits trellis, chemical proof shutter, cold storage warehouse, direct sales facility, and chipper
26	Fruits	IV	Management mainly by operating a tourist farm where tourists can pick fruits	80 (Facility 0) 80	2 + employee 0.5	Pear, grape, blueberry	Speed sprayer, sprinkling equipment, fruits trellis, bird net, and direct sales facility
27	Potted plants	II	Management by producing ground cover plants and container potted shrubs, etc.	220 (Facility 20) 220	2 + employee 2	Ground cover plants and shrubs in general	Agriculture Greenhouses and automatic irrigation systems
28	Potted plants	II	Management featuring potted plants, by producing mainly trees for tree planting	300 (Facility 6) 300	2.5	Deciduous tall trees, shrubs in general, and lower trees in general	Agriculture Greenhouses and truck with crane
29	Animal husbandry	I	Management featuring pig farming, trying to recycle regional resources	30 500 pigs (growing-finishing pigs)	2	Growing-finishing pigs and manure	Pigpen, manure handling and disposing shed, livestock feed adjusting facility, and wheel loader

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
30	Animal husbandry	I	Management by breeding of egg-laying hens and direct sales of hen's eggs	30 5,000 hens (egg-laying hens) 1,000 fowls (Tokyo Silky Fowls)	2 + employee 1	Chicken eggs and fermented chicken manure	Poultry house, manure handling and disposing shed, and direct sales facility
31	Animal husbandry	II	Management mainly composed of breeding Japanese Black Cattle	150 30 cows (breeding cows)	1 + employee 0.5	Calves and barnyard manure	Cattle barn, manure handling and disposing shed, and wheel loader
32	Animal husbandry	II	Integrated management by raising Tokyo X pigs	30 30 pigs (mother pigs)	2	Tokyo X pigs and barnyard manure	Pigpen, manure handling and disposing shed, automatic feeding machine, and wheel loader
33	Animal husbandry	II	Management mainly composed of fattening Japanese Black Cattle	100 50 cows (fattening cows and breeding cows)	2	Beef cattle and barnyard manure	Cattle barn, manure handling and disposing shed, and wheel loader
34	Animal husbandry	II	Integrated management by raising Tokyo X pigs and ordinary pigs	30 15 pigs (Tokyo X mother pigs) 25 pigs (ordinary mother pigs)	2	Tokyo X pigs, ordinary growing-finishing pigs, and barnyard manure	Pigpen, manure handling and disposing shed, automatic feeding machine, and wheel loader
35	Animal husbandry	III	Management by direct sales of egg-laying hens and egg processed food	50 3,000 hens (egg-laying hens)	2 + employee 0.5	Chicken eggs, egg processed food	Poultry house, manure handling and disposing shed, processing facility, and direct sales facility
36	Tea	III	Integrated management mainly composed of retailing raw tea leaves and manufactured tea	150 (Facility 0) 150	2	Tea	Riding tea plucking machine, frost protection fan, tea manufacturing machine, and selling facility
37	Combined	I	Management featuring protected horticulture mainly for passion fruit	30 (Facility 20) 30	1 + employee 1	Passion fruit, mango, lemon, tomato, etc.	Agriculture Greenhouses and fruit trellis
38	Combined	I II	Management mainly composed of contracted shipping to mass retailers and schools for school lunches, and direct sales of vegetables, cut flowers and fruit	80 (Facility 20) 160	3 + employee 1	Tomato, cucumber, edamame soybeans, sweet corn, cut flowers, and blueberry	Agriculture Greenhouses, precooling chamber, and heating units
39	Combined	IV	Multiple management by combining tourist farm and direct sales	80 (Facility 0) 80	2 + employee 0.5	Blueberry, kiwi fruits, vegetables, etc.	Bird net, processing facility, direct sales facility, and eating experience facility

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### (3) Business model for supporting an expanse of agriculture (target income : 3 million yen)

This model establishes agricultural management that promotes each area's characteristics by utilizing agricultural land, facilities, machinery and equipment under family operation.

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
1	Vegetables	I II	Management featuring vegetables, by shipping to a variety of partners, such as cooperative direct sales stores, direct spot sale stores, mass retailers, and schools for school lunches, etc.	60 (Facility 5) 100	2	Tomato, cucumber, Japanese mustard spinach, turnip, broccoli, Edo-Tokyo vegetables, etc.	Agriculture Greenhouses and precooling chamber
2	Vegetables	I IV	Management by combining direct sales of many varieties of vegetables and running tourist farms	50 (Facility 10) 70	2.5	Tomato, cucumber, Japanese mustard spinach, spinach, etc. and blueberry	Agriculture Greenhouses and direct sales facility
3	Vegetables	II	Management featuring marketing of mainly fruits and vegetables	50 (Facility 20) 80	2	Tomato, cucumber, and vegetable seedlings	Agriculture Greenhouses and precooling chamber
4	Vegetables	II	Management mainly composed of marketing and shipping for school lunch, specializing in Japanese mustard spinach	25 (Facility 20) 120	2	Japanese mustard spinach	Agriculture Greenhouses and precooling chamber
5	Vegetables	II	Management mainly composed of marketing wasabi horseradish	50 (Facility 2) 50	2	Wasabi, horseradish	Raising seedling house
6	Vegetables	II	Management mainly composed of marketing ashitaba	80 (Facility 0) 80	2	Ashitaba	Bagging machine
7	Vegetables	III	Management by combining direct sales of vegetables and processing and sales of farm products	50 (Facility 10) 80	2.5	Sweet corn, daikon radish, taro and processed products (confectionery and daily dishes)	Agriculture Greenhouses, processing facility and precooling chamber
8	Vegetables	IV	Management mainly composed of operating a garden for experiencing farm work and direct sales of vegetables	50 (Facility 0) 60	2	Tomato, eggplant, spinach	Agriculture Greenhouses and farm work experience facilities
9	Flowers	II	Management by marketing mainly flower bed seedlings and pot flowers	40 (Facility 10) 80	2	Flower bed seedlings and pot flowers	Agriculture Greenhouses, automatic irrigation systems, wheel loader, and seeding machine
10	Flowers	II	Management by marketing cut leaves	40 (Facility 20) 40	2	Dianella, ruscus, leather fern, etc.	Agriculture Greenhouses
11	Flowers	II	Management by marketing Eurya japonica	50 (Facility 0) 50	1	Eurya Japonica	Carrier
12	Fruits	I	Management featuring fruits, by mainly producing Japanese pears and grapes	30 (Facility 0) 30	2 + employee 0.5	Pear, Grape, kiwi fruit, persimmons	Speed sprayer, fruits trellis, sprinkling facility, direct sales facility, and chemical proof shutter
13	Fruits	III	Management mainly composed of production, processing, and sales of Japanese apricot, yuzu citrus, persimmons, etc.	60 (Facility 0) 60	2	Japanese apricot, pickled dried plum, citrus fruits, persimmon	Processing facility and direct sales facility
14	Fruits	IV	Management featuring fruits, mainly by picking and direct sales of blueberries	40 (Facility 0) 40	2	Blueberry	Bird nets and direct sales facility

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15	Potted plants	II	Management featuring potted plants, by producing mainly trees for planting	100 (Facility 5) 100	1.5	Tall deciduous trees, general shrubs, and general short trees	Agriculture Greenhouses and truck with crane
16	Farm products	III	Management by production, processing and sales of buck wheat, wheat, soybeans, etc.	60 (Facility 0) 90	2	Buck wheat, wheat, and soybeans	Combine harvester, processing facility, and tasting facility
17	Combined	I	Management featuring direct sales of cut flowers and various vegetables	40 (Facility 5) 60	2	Cut flowers and vegetables	Agriculture Greenhouses, heating unit, and direct sales facility
18	Combined	I	Multiple management mainly composed of spot sales of Tokyo Silky Fowls and vegetables	50 (facility 5) 100 fowls 60 a	2	Tokyo Silky Fowls, tomato, cucumber, cabbage, broccoli, Japanese mustard spinach, etc.	Poultry house, compost depot, and direct sales facility
19	Combined	I II	Multiple management mainly composed of marketing podded peas and cut leaves	30 (Facility 20) 40	1	Podded peas, cut leaves, decorative branches, etc.	Agriculture Greenhouses
20	Combined	IV	Combined management of producing passion fruits, lemons, and tomatoes	30 (Facility 10) 40	2	Passion fruit, lemon, tomato	Agriculture Greenhouses and fruits trellis

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#### (4) Business model for corporations (sales target: 50 million yen and above)

This model aims at large-scale agricultural management bodies that actively incorporate employment and a stable work force for high profitability.

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
1	Vegetables	II	Highly intensive management by producing hydroponic leaf vegetables such as Japanese mustard spinach, etc.	40 (Facility 40) 480	3 + employee 4	Japanese mustard spinach, salad, mini-celery, etc.	Agriculture Greenhouses, hydroponic cultivation facility, adjusting and packing facility, and precooling chamber
2	Vegetables	III	Management by marketing vegetables grown in greenhouses and outdoors	250 (Facility 60) 650	6 + employee 7	Small turnip, spinach, potheb mustard, taro, carrot	Agriculture Greenhouses, precooling chamber, vegetable washer, and water well for sprinkling
3	Flowers	II	Corporate management by producing special flowers and ornamental pot flowers	500 (Facility 80) 500	3 + employee 5	Phoenix spp. and ornamental potted flowers	Agriculture Greenhouses and storage space for horticulture soil
4	Potted plants	II	Management by production and distribution of trees for planting	500 (Facility 50) 500	2 + employee 1	Tall deciduous trees, general shrubs, and general short trees	Raising seedling house, truck with crane and back hoe
5	Animal husbandry	II	Dairy farm management introducing milking robots	300 100 cows (delivered cows)	3 + employee 2	Raw milk and barnyard manure	Cattle barn, milking robot, bulk cooler, TMR feeding machine, and manure handling and disposing shed
6	Animal husbandry	III	Corporate management by processing dairy products	-	2 + employee 4	Dairy products	Pasteurizer, filling machine, ice creamer, refrigerating and freezing chamber, and show case
7	Processing	III	Corporate management by processing and sales of local agricultural and livestock products	-	3 + employee 3	Processed products (daily dishes and box lunch)	Show case, gas type automatic fryer, cold table, and refrigerating chamber

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