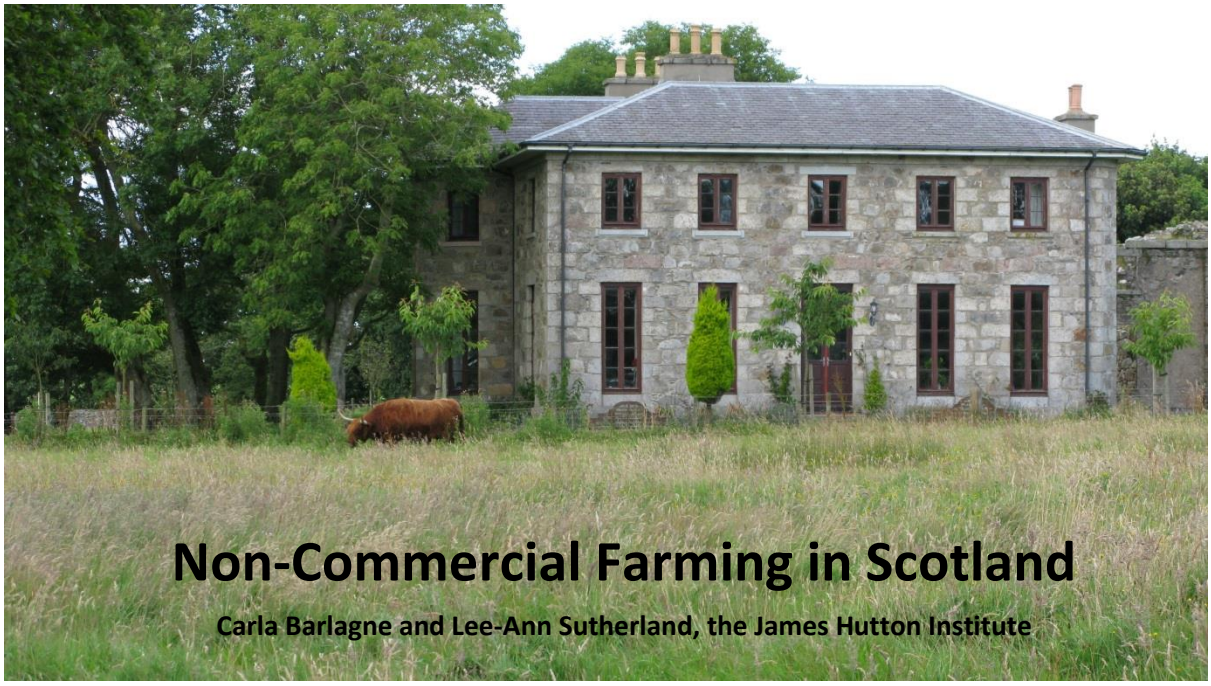

Non-Commercial Farming in Scotland

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1. Introduction

Although there have been a number of examples of hobby or recreational approaches to farming identified in the literature, little is known about the amount of land involved, commodity production or relationship to farm diversification activities. The aim of this briefing is to increase understanding of the role of non-commercial farmers by presenting findings of the analysis of a structural survey of Scottish farming and of the June Agricultural Census that were undertaken in 2013. We compare farm business characteristics and activities of those farmers who indicated that they did not operate their enterprises for profit (non-commercial farmers) with those who operate their business for profit (commercial farmers). We then develop a typology of non-commercial farming approaches, utilising these to consider differences in non-commercial farmer demographics, tenure and commodity production.

2. Key findings

- Non-commercial farmers do not expect to make a profit from their holding and some expect to make a loss.
- Non-commercial farmers represent 16.6% of the Scottish land holdings that were surveyed and 13% of the agricultural land of the sample, totalling 82 359 ha.
- 40% of the non-commercial farmers surveyed received the Single Farm Payment.
- 22% have participated in an agri-environmental scheme
- 48% of the non-commercial farmers consider themselves to be full part-time or full time farmers; only 38% consider themselves to be hobby farmers.
- 19% of the non-commercial farmers surveyed employ people on their farms.
- Women are more likely to engage in non-commercial farming than in commercial farming but non-commercial farming is still male dominated.
- Non-commercial farmers are more highly educated than commercial farmers.
- Non-commercial farmers are more likely to be tenant farmers (than owner operators), but are less likely to have inherited their holding.
- 74% of the non-commercial farmers surveyed have been involved in farming for more than 10 years.
- 19.5% of the non-commercial farms are over 50 ha in size.
- 23% of the non-commercial farms are crofts.

3. What did we do?

The data for this information note were generated from a representative telephone survey that was undertaken in collaboration between the James Hutton Institute and Scotland's Rural College, which surveyed a sample of 10, 000 Scottish land holdings in 2013, leading to 2,416 responses. Of these, some 36 individuals were discarded from the analysis because of extreme values. Therefore the analysis was performed on a sample of 2,380 individuals out of which 16.6% were non-commercial farms.

Using descriptive statistics, we compared non-commercial and commercial farms to understand the main characteristics and differences. We performed chi-square test for independence using the Yate's correction for continuity when performing the test on 2 by 2 tables.

Because making profit from the farm is not the main objective of non-commercial farmers, we therefore expect to observe patterns that are quite different from those observed for commercial farmers. We focused the analysis on understanding the use non-commercial farmers make of the land asset, the relative importance of diversification and on-farm activities as well as their combination of productive activities. We further characterised non-commercial farmers on the valence granted to those variables by elaborating a typology of non-commercial farmers. Building a typology also allows the consideration of interventions and policies targeting each specific type. The method that was used to produce the typology of non-commercial farmers was Multiple Correspondence Analysis (MCA), followed by a Hierarchical Ascendant Clustering (HAC). The MCA is used when dealing with categorical or qualitative data while the HAC enables the grouping of individuals (here farms) based on their proximity (or resemblance).

In order to reflect the intensity in which non-commercial farmers engage in particular activities we transformed the variables of interest into categorical variables that reflected the distribution of the data while allowing a dichotomous categorisation of the types on a commercial or recreational scale. Therefore, the variables that were retained for the analysis and their modalities are the following:

- The engagement into a diversification activity (yes/no)
- The class size (4 class sizes):
    - Very small farms: < 10 ha
    - Small farms: 10 to 50 ha
    - Medium farms: 50 to 200 ha
    - Large farms or Estates: > 200 ha
- Engaging in crop farming (2 class sizes):
    - Recreational scale: < 10 ha
    - Commercial scale: > 10 ha
- Engaging in cattle and sheep farming (2 flock sizes)
    - Recreational scale: up to 10 cattle and 50 sheep
    - Commercial scale: less than 10 cattle and 50 sheep
- Engaging in horse raising (2 herd sizes)
    - Recreational scale: up to 5 horses
      Commercial scale: more than 5 horses
- Engaging in small animal husbandry (2 flock/herd sizes)
    - Recreational scale: Up to 10 pigs, 100 poultry and 20 other livestock
    - Commercial scale: More than 10 pigs, 100 poultry and 20 other livestock

In the survey, diversification referred to the engagement in non-farming activities such as processing and retailing, tourism and recreation, forestry, agricultural services, renewable energy, equine services or other non-farming activities.

4. Who are the non-commercial farmers?

A total of 2380 respondents were retained for the analysis of the 2013 CAP Intentions Survey. Amongst them, non-commercial farmers are those farmers who own land and have an agriculture or natural resources related business but operate it on a non-profit basis. In total, 395 non-commercial farmers were identified in the data set (i.e. 16.6% of the sample that was surveyed (Table 1).

Table 1 Is this enterprise operated for profit?

Survey responses options	Number of Respondents	Percentage (%)
No - but it is important that it break even	284	11.9
No - we expect to make a loss	111	4.7
Yes	1985	83.4

Together they own 82 359 ha of the land of the surveyed sample i.e. 13% of the total area of the sample. Extrapolated across Scotland, this could mean that some 741 00 ha of land are being managed by non-commercial farmers. Non-commercial farmers (NCF) do not expect to sustain their livelihoods while operating their business since they either expect to break even or to make loss.

Nevertheless, comparing responses to that question to those of the self-identification as a farmer ('Do you consider yourself to be…?'), interestingly the results show that 18% of the non-commercial farmers consider themselves to be full time farmers (Table 2). Of these, 79% (or 56) expected to break even and 11% (or 15) to make losses. Only 38% of non-commercial farmers consider themselves to be hobby farmers; some 30% consider themselves to be part-time farmers. This indicates that hobby farming and non-commercial farming are not synonymous – there are hobby farmers who seek to make a profit from their farms, and more commonly, farmers who do not seek to make a profit from their agricultural production, but who do not see themselves as hobby farmers.

Table 2 Self-identification of the non-commercial farmers: Do you consider yourself to be a… (% of respondents in each category for the diverse types of farmers)?

Group of interest	Non-commercial farmers	Commercial farmers	Global sample
Business person	1.2	0.8	0.8
Full time farmer	17.9	73.3	63.8
Hobby farmer	37.9	1.3	7.6
Manager	9.0	5.4	6.0
Part time farmer	30.1	18.9	20.8
Other	3.9	0.5	1.1

Overall, women are more likely to engage in non-commercial farming than is characteristic of commercial farming (38% in the NCF group against 15% of the CF group) but non-commercial farms are still mostly operated by men (62% of the NCF group) (Table 3). Non-commercial farmers also tend to be more highly educated than commercial farmers, even when controlling for gender (in aggregate, women in the survey were more highly educated than men).

Table 3 Socio-demographic characteristics of commercial and non-commercial farmers compared to the global sample (%)

(Significant differences between groups for: ** alpha value of 0.05 and * alpha value of 0.01; [1]counts were too small to perform the khi-square test of significant difference)**

Factor	Category of interest	Non-Commercial Farms	Commercial Farms	Global sample
Gender* **	female	38.5	15.3	19.2
	male	61.5	84.7	80.8
Age[1]	<35	3.0	5.5	5.1
	36-44	11.6	10.0	10.3
	45-54	25.8	28.9	28.4
	55-64	27.1	31.5	30.8
	over 65	32.4	24.1	25.5
Educational achievement* **	school	41.0	46.6	45.7
	college	29.1	35.0	34.0
	university or higher	29.9	18.4	20.3
Status in relation to land* **	manager	4.8	3.9	4.0
	owner	63.5	62.1	62.4
	tenant	25.1	20.0	20.8
	tenant and owner	6.6	14.0	12.8
Time involved in holding* **	less than 5 years	10.4	4.1	5.1
	around 5 to 10 years	16.7	4.9	6.9
	around 10 to 20 years	20.8	13.9	15.0
	more than 20 years	52.2	77.1	72.9
Employ staff* **	none	81.0	44.4	50.5
	one to three	17.5	46.3	41.6
	four to ten	1.3	8.1	7.0
	more than ten	0.3	1.2	1.0
Self identity [1]	business person	1.3	0.7	0.8
	full time farmer	18.0	73.3	64.1
	hobby farmer	38.0	1.3	7.4
	manager	9.1	5.4	6.0
	part time farmer	29.6	0.5	1.1
	other	4.1	18.8	20.6
Inherited the holding* **	no	58.0	30.5	35.1
	yes	42.0	69.5	64.9
Holding size* **	Very small	56.7	7.5	15.7
	Small	23.8	14.5	16.1
	Medium	12.4	49.2	43.1
	Large or estate	7.1	28.8	25.2

In terms of land tenure, NCF are more likely than commercial farmers to be tenants. However, the majority of NCF do own their farms. NCF are also most likely to be new entrants in the farming activity as revealed per the time they have been involved in a farming activity. If we take into account the fact that they are less likely than commercial farmers to

have inherited their farm, it suggests that a substantial cohort within NCF results from a voluntary act to acquire land to fulfil a specific lifestyle or set of values. However, there is another cohort who may have inherited tenancies and opted to pursue farming or crofting on a part-time or non-commercial basis.

The NCF are also more likely to be aged over 65 than the CF. Looking at the amount of time respondents from this group have been involved in farming reveals that 88% of the NCF aged over 65 have been involved in farming for more than 10 years and 71% for more than 20 years. This suggests that these farmers may have transitioned to non-commercial farming as a form of semi-retirement.

Interestingly, although NCF do not make a profit of their activity, a significant proportion of them (19%) have employees.

5. Economic prospects of the household and future of the farm

As could be expected given their non-commercial orientation, NCF are not heavily subsidy reliant. Some 40% of the NCF reported receiving the Single Farm Payment, but this represented more than 50% of the income from the enterprise only 11%. Some 22% of NCF have been involved in an agri-environmental scheme since 2005 and 27% plan to remain to become involved in agri-environmental scheme by 2020. In addition, 27% of the NCF received other government subsidies but those subsidies were significant for only 2% of the NCF (i.e. the subsidies accounted for more than 50% of the income from the enterprise).

When it comes to examining the capital value of the farm business, this value has increased for 47% of NFC, most likely reflecting the increased value of agricultural land, but potentially also reflecting investments made in holding development. NCF are generally positive about the economic prospects of their households: 46% and 39% of the NCF considered the economic prospects of their household to be fair and good to excellent respectively. Further analysis of economic prospects is presented in relation to the subtypes of non-commercial farmers identified in Section 7.

Table 4 Proportion of non-commercial and commercial farmers operating non-farming enterprises on farm (%)

(some counts were too small to perform the khi-square test of significant difference)

Factor	Group of interest	Non-commercial farmers	Commercial farmers	Global sample
Non-farming enterprises operated on farm	Retail	1.9	2.0	1.9
	Tourism, recreation	5.8	8.9	8.3
	Forestry	6.7	3.9	4.3
	Agricultural services	2.9	2.2	2.3
	Renewable	4.3	7.7	7.1
	Equine	3.8	2.0	2.3
	Other	9.9	9.3	9.4

6. Engagement in non-farming activities

NCF operate non-farming enterprises on their farms but not in great proportions. In addition, those proportions are surprisingly not more common to those of the commercial farmers as revealed in Table 4. This suggests that non-commercial farmers primarily use their land recreationally or as a place to live rather than a way to generate income from non-farming sources. Forestry and horses are associated with amenity lifestyles. NCF are more likely to be organic or in conversion than CF but the proportion remains low nevertheless. In some

cases, this may reflect a lack of interest in formally certifying their production, since their focus is not on profit.

7. A typology of non-commercial farmers

To better understand the different approaches within 'non-commercial farming', the researchers developed a typology, differentiating 7 types of non-commercial farmers on the basis of holding size, engagement in diversification or farming activities and the types of commodities produced (e.g. crops and/or different types of animals). Within the typology, the size appeared to be the major differentiating factor for 5 types out of 7 (types 1, 2, 5, 6 and 7) while the productive orientation appeared to be the main criteria for two types (types 3 and 4).

Type 1: 'Very small diversified farms' have small amounts of sheep and cattle farming activity. The farms in this type also have up to 10 ha of crops and have few horses and other livestock and small animals, but these features do not specifically distinguish them from the farms in the other types. They are distinguished by their very small scale and diversification activities.

Type 2: 'Very small non-diversified farms' are very small non-diversified farms that engage in small scale farming. Those farms engage in recreational-scale cattle and sheep farming as well as small animal husbandry, they have a few horses and up to 10 ha of crops.

Type 3: 'Horse farms' are specialized in horse production. These farms are mostly very small farms that do not engage in another diversification activity and may have small amounts of farming activity, but not more than the average NCF farm. Their distinctive feature is the ownership of more than 5 horses.

Type 4: 'Mixed farms with small amounts of production' is comprised of farms all engage in small animal husbandry. These farms fall within the first three class sizes and mostly do not engage in diversification, but those features do not distinguish them from the average NCF farm.

Type 5: 'Small cattle and sheep farms' are farms between 10 and 50 ha in size, that engage in cattle and sheep farming either on a recreational-scale (up to 10 cattle and 50 sheep) or on what appears to be a commercial scale (more than 10 cattle and 50 sheep). Some engage in horse riding at a small scale and have up to 10 ha of crops. Farms within this type are mainly non-diversified.

Type 6: 'Medium mixed farms' are mostly medium sized farm with large cattle and sheep flocks. The farms are mainly non-diversified farms that have up to 10 ha of crops, a few horses and engage in small animal husbandry.

Type 7: 'Large farms and estates' are comprised of holdings over 200 ha in size, which primarily engage in commercial-scale cattle and sheep farming. Half of these holdings are diversified.

Table 5 Typology of the non-commercial farmers (percentages are displayed, *discriminative variables)

Factor	Type / Category of interest	Very small diversified farms	Very small non-diversified farms	Horse farms	Mixed farms with small amount of production	Small cattle and sheep farms	Medium mixed farms	Large farms and estates
Proportion within the sample		14.0	39.0	4.0	3.0	21.0	13.0	6.0
Diversification	Yes	100*	0.0	28.6	40.0	19.3	18.9	48*
	No	0.0	100*	71.4	60.0	80.7	81.1	52*
Size	Very small	100*	100*	64.3	50.0	0.0	0.0	0.0
	Small	0.0	0.0	14.3	30.0	100*	11.3	0.0
	Medium	0.0	0.0	14.3	20.0	0.0	84.9*	0.0
	Large or estate	0.0	0.0		0.0	0.0	3.8	100*
Cattle & Sheep	Up to 10 cattle and 50 sheep	100*	100*	78.6	80.0	50.6*	11.32*	20*
	More than 10 cattle and 50 sheep	0.0	0.0	21.4	20.0	49.4*	88.68*	80*
Ownership of crops	Up to 10 ha of crops	100.0	100*	92.9	90.0	100*	67.9	100.0
	More than 10 ha of crops	0.0	0.0	7.1	10.0	0.0	32.1	0.0
Ownership of horses	Up to 5 horses	100.0	100*	0.0	100.0	100*	100.0	100.0
	More than 5 horses	0.0	0.0	100*	0.0	0.0	0.0	0.0
Ownership of pigs and poultry and other livestock	Up to 10 pigs and 100 poultries and 20 other livestock	100.0	100*	100.0	100*	100.0	100.0	100.0
	More than 10 pigs and 100 poultries and 20 other livestock	0.0	0.0	0.0	0.0	0.0	0.0	0.0

8. Characteristics of the seven types

Descriptive statistics were performed for the 7 types of farmers to understand more about the people and the characteristics of the farm. Additionally a focus was made on crofters (23% of the NCF) in order to understand their distribution across types.

Type 1: Very small diversified farms

Respondents of this type were equally divided between genders, and aged predominantly 45-54 and over 65. Half of the respondents of this type have a university degree or higher. Most of them are owners of their farms and more than a half have been invested in the farming business for more than 20 years. Most of them are the main person employed on the farm and did not inherit their business. A large proportion of them (40.7%) consider themselves to be hobby farmers and a quarter of them consider themselves to be part time farmers. 19% of them are crofters.

Type 2: Very small non-diversified farms

This type is comprised of slightly more men than women. Respondents are quite spread across the age scale that ranges from 45 to more than 65. They predominantly hold a school degree and most of them are the owners of their farms. Most of them have been involved in farming for more than 20 years. The vast majority do not employ people and a large proportion (65%) of them inherited their farms. More than half of them consider themselves to be hobby farmers and more than a quarter as part time farmers. Almost a third of this type are crofters.

Type 3: Horse farms

Type 3 is comprised of as many women as men, who are quite spread across the age scale that ranges from 45 to more than 65. A large proportion of them (43%) have a university degree or higher but more than a third have only a school degree. Most of them are owners of their farms and have been involved in farming from 10 to more than 20 years. More than a quarter of them employ between 1 and 10 people and most of them did not inherit their farms. A large proportion of them (43%) consider themselves to be hobby farmers, but more than a fifth consider themselves to be full time farmer and part time farmers. None of this type identified themselves as crofters.

Horses on a small-holding in North East Scotland

Type 4: Mixed farms with small amounts of production

This type is clearly male dominated, with far more men than women (80% versus 20%). This type is also older, with 80% more than 55 years old. The majority of the type has rather a low level of education as half of the type has a school degree and 40% has a college degree. Most of them (80%) are managers of the farm and the type is comprised of a fairly large proportion of new entrants to farming (40% have been involved in farming for the last 5 to 10 years). While the majority are the only person employed on the farm, quite a large proportion (40%) of them employ between one and three people. Most of them did not inherit the business. Half of them consider themselves to be hobby farmers and almost a third consider themselves part time farmers. 20% of them are crofters.

Table 6 Socio-demographics characteristics of the seven groups

Factor	Type Category of interest	Very small diversified farms	Very small non-diversified farms	Horse farms	Mixed farms with small amounts of production	Small cattle and sheep farms	Medium mixed farms	Large farms and estates
Gender	female	50.0	41.7	50.0	20.0	36.1	28.3	24.0
	male	50.0	58.3	50.0	80.0	63.9	71.7	76.0
Age	<35	3.7	3.2	7.1	0.0	2.4	1.9	4.0
	36-44	11.1	10.9	14.3	0.0	12.0	9.4	24.0
	45-54	31.5	25.0	28.6	20.0	22.9	34.0	12.0
	55-64	16.7	26.9	21.4	50.0	32.5	26.4	28.0
	over 65	37.0	34.0	28.6	30.0	30.1	28.3	32.0
Educational achievement	school	22.22	45.5	35.7	50.0	44.6	50.9	20.0
	college	27.78	25.6	21.4	40.0	30.1	37.7	32.0
	university or higher	50.00	28.8	42.9	10.0	25.3	11.3	48.0
Status in relation to land	manager	1.9	0.6	14.3	80.0	2.4	7.5	32.0
	owner	74.1	68.6	78.6	10.0	53.0	60.4	36.0
	tenant	18.5	25.6	7.1	0.0	36.1	18.9	28.0
	tenant and owner	5.6	5.1	0.0	0.0	8.4	13.2	4.0
Time involved in holding	less than 5 years	7.4	10.9	7.1	10.0	8.4	9.4	24.0
	around 5 to 10 years	16.7	18.6	14.3	40.0	19.3	3.8	16.0
	around 10 to 20 years	20.4	28.2	35.7	10.0	14.5	11.3	12.0
	more than 20 years	55.6	42.3	42.9	40.0	57.8	75.5	48.0
Employ staff	four to ten	1.9	0.0	14.3	0.0	0.0	0.0	8.0
	more than ten	0.0	0.0	0.0	0.0	0.0	0.0	4.0
	none	88.9	92.3	71.4	60.0	84.3	62.3	36.0
	one to three	9.3	7.7	14.3	40.0	15.7	37.7	52.0
Inherited the holding	no	75.9	64.7	92.9	70.0	42.2	39.6	44.0
	yes	24.1	35.3	7.1	30.0	57.8	60.4	56.0
Self identity	business person	1.9	0.6	0.00	0.0	3.6	0.0	0.0
	full time farmer	1.9	6.5	21.4	10.0	25.3	54.7	24.0
	hobby farmer	40.7	53.2	42.9	50.0	33.7	7.6	8.0
	manager	18.5	5.1	14.3	10.0	6.1	3.8	32.0
	other	11.1	5.1	0.0	0.0	0.0	0.0	8.0
	part time farmer	25.9	29.5	21.4	30.0	31.3	33.9	28.0
Proportion of crofters		18.5	29.5	0.0	20.0	13.1	9.4	12.0

Type 5: Small cattle and sheep farms

This type are about a third of women and two thirds of men who are quite spread across the age scale that ranges from 45 to more than 65. The distribution across the education levels is more evenly spread than in the other types since a quarter of the respondents have a university degree or higher, almost a third have a college degree and 45% of the respondents have a school degree. More than half of this type owns their farms and a little more than a third have a tenant status. More than half of the respondents have been involved in farming for more than 20 years. Most of them are the only person employed on the farm and more than half of them inherited their business. More than a third consider themselves to be hobby farmers; almost a third part time farmers and quarter consider themselves to be fulltime farmers. 13% of them are crofters.

Type 6: Medium mixed farms

This type is dominated by men (72% men to 28 women), and are quite spread across the age scale that ranges from 45 to more than 65. Half of them have a school degree and more than a third have a college degree. Most of them are the owners of the farm (60%) and a great proportion (76%) of them have been involved in farming for more than 20 years. While more than a half is the only person to be employed on the farm, more than a third employs from one to three people. Most of them (60%) have inherited their business. More than a half considers themselves as full time farmers while more than a third considers themselves as part time farmers. Some 9% of this type are crofters.

Type 7: Large farms and estates

This type is also predominantly men (76% men to 24% women). Respondents are quite spread across the age scale that ranges from 36 to more than 65 with almost a quarter of them aged between 36 and 44. Almost half of them have a university degree or higher, almost a third of them have a college degree and a fifth of them have a school degree. The population counts with quite similar proportions of managers, owners and tenants. Most of the respondents within the type have been involved in farming for more than 20 years but almost a quarter of them have recently been engaged in farming (i.e. for less than 5 years). More than a half inherited their holding. More than half employ one to three people. The status of the respondents are quite diverse with almost a third consider themselves to be manager, more than a quarter being a part time farmer and almost a quarter considering themselves to full time farmers. The high percentage of managers is indicative of estates. However, some 12% of them are crofters (i.e. include croft land in their holdings).

9. Economic prospects of the household

When it comes to the economic prospects of the farms since 2005, it is interesting to note that the value of the farm has increased in all the types but that overall the economic position as well as the economic prospects of the household are considered to be fair by the largest cohort of respondents. Type 3 which represents 4% of the surveyed non-commercial farms, is quite different from the others since it shows the biggest proportion of increase of the value of the farm with no decrease at all compared to the other Types. Type 3 is also the type with the largest proportion of farmers who think that the economic position of their household is good (35.7%) or excellent (21.4%) and the type with the largest proportion of farmers who think their economic prospects are good (57.1%) or excellent (21.4%).

Table 7 Economic prospects of the household

Factor	Type / Category of interest	Very small diversified farms	Very small non-diversified farms	Horse farms	Mixed farms with small amount of production	Small cattle and sheep farms	Medium mixed farms	Large farms and estates
Since 2005 has the capital value of your farm business…	decreased	3.7	11.5	0.0	20.0	15.7	7.5	12.0
	increased	51.9	41.7	85.7	50.0	41.0	56.6	64.0
	stayed the same	44.4	46.8	14.3	30.0	43.4	35.8	24.0
Taking all of your income sources into account, how would describe the current economic position of your household?	bad	7.4	3.8	0.0	0.0	4.8	1.9	0.0
	poor	13.0	6.4	7.1	30.0	14.5	24.5	8.0
	fair	40.7	53.8	35.7	50.0	59.0	52.8	68.0
	good	27.8	32.7	35.7	20.0	19.3	20.8	16.0
	excellent	11.1	3.2	21.4	0.0	2.4	0.0	8.0
Taking all of your income sources into account, how would you describe the economic prospects for your household over the next five years?	bad	3.7	2.6	0.0	10.0	3.6	0.0	0.0
	poor	13.0	9.0	7.1	20.0	16.9	13.2	20.0
	fair	35.2	49.4	14.3	30.0	47.0	54.7	48.0
	good	35.2	34.0	57.1	30.0	31.3	30.2	28.0
	excellent	13.0	5.1	21.4	10.0	1.2	1.9	4.0

Looking at the contribution of the Single Farm Payment to the income from the holding, it is generally low except for Type 1, Type 2 and Type 3, average for Type 4 and Type 5 where it accounts for more than 25% of the income for a fifth of the farms. It is important for Type 6 and Type 7 for which it accounts for more than 25% of the income for 55% and 44% of the farms of those types respectively.

Table 8 Share of the Single Farm Payment in the income of the holding

Factor	Type / Category of interest	Very small diversified farms	Very small non-diversified farms	Horse farms	Mixed farms with small amount of production	Small cattle and sheep farms	Medium mixed farms	Large farms and estates
Percentage of holding income from the Single Farm Payment	**zero**	90.7	83.3	78.6	60.0	37.3	17.0	28.0
	less than 25%	7.4	7.1	14.3	20.0	33.7	28.3	28.0
	around 25-50%	0.0	3.2	0.0	20.0	18.1	32.1	24.0
	around 50-75%	1.9	3.2	7.1	0.0	6.0	15.1	8.0
	over 75%	0.0	3.2	0.0	0.0	4.8	7.5	12.0
From 2005, this income has…	**decreased**	7.4	5.1	0.0	10.0	20.5	15.1	28.0
	increased	0.0	1.3	0.0	10.0	2.4	5.7	4.0
	stayed the same	92.6	93.6	100.0	80.0	77.1	79.2	68.0

10. What are the implications for Policy?

Finding from this research are intended to provide background support to broader Scottish Government initiatives. Non-commercial farmers manage their land differently from commercial farmers since they pursue different objectives. Although these farms form a minority, they appear to occupy a substantial portion of Scottish agricultural land (some 13%). Significant numbers of non-commercial farmers also receive agricultural and rural development subsidies.

Although non-commercial farms do not seek to make profit, a certain proportion of them employ people therefore contributing to maintaining activity in rural Scotland. The largest farms which represent 40% of the sample (types 5, 6 and 7) are the ones that benefit most from the Single Farm Payment. Smaller farms (types 1, 2 and 3) are not as reliant on the Single Farm Payment and either maintain a lower profiled agricultural activity, probably primarily semi-subsistence farming (type 1 and 2) or engage in horse farms (type 3) that generate employment. Type 4 represents a middle ground between those two categories of farms. The number of respondents who identified themselves as 'managers' suggests that there are estates being run on a non-commercial basis.

Whereas non-commercial farming is sometimes associated with gentrification (i.e. migration of highly capitalised new entrants into farming), this research shows that, to some extent, non-commercial farmers are also people who have been engaged in farming for a long period of time. There are also a number of non-commercial farms who farm on a full-time basis. This suggests that non-commercial farming could result from a household strategy where one of the household's members would provide most of the spending money for the household while others would provide the house and vehicles through the farm. Non-commercial farmers could also be semi-retired or retired farmers who have transitioned from commercial farming through semi-retirement. Crofting is well-recognised as a lifestyle choice; a disproportionate percentage of the non-commercial farmers were identified as crofters, although the majority of crofters seek to make a profit.

11. Acknowledgements

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12. Further information

Data analysis used R (https://cran.r-project.org/) including functions from the packages 'FactoMineR' (https://CRAN.R-project.org/package=FactoMineR), 'gmodels' (https://cran.r-project.org/web/packages/gmodels/index.html) and 'questionr' (https://CRAN.R-project.org/package=questionr), 'Rcmdr' (https://cran.r-project.org/web/packages/Rcmdr/index.html)