Consultation Response on the Scottish Land Use Strategy (LUS) on behalf of Nourish Scotland.

Nourish Scotland welcomes this opportunity to comment on the emerging Land Use Strategy for Scotland. In responding to this phase of public engagement on the Land Use Strategy we seek to represent, as closely as possible, the views of the community and local food sector. We have consulted widely over several months with our 200 members, who represent local food producer and community food groups across Scotland, each with their own membership. We have held 2 national discussion meetings; an on-line discussion, and sought out comments from partner organisations.

Nourish recommends that Scotland’s new Land Use Strategy addresses 11 main points, and we have grouped these into four areas. They are:

**Get the fundamentals right**
1. Stick to internationally agreed definition of sustainable development.
2. Food security trumps everything else
3. Create a robust mechanism for community based decision making on the use of land

**It’s time to tackle big barriers to sustainable land use**
4. Localised food production needs to replace the long distance supply chains
5. Current land ownership patterns will have to change
6. End all caged livestock production

**Create the opportunity for communities to become resilient**
7. Space to grow.
8. Skills to grow

**Lead the change toward land use that delivers what society values most**
9. Develop and reward carbon friendly land use
10. Value the ecosystem services that land use can deliver to the communities
11. Lead the way toward healthy soil management

Below we set out, in brief, the views of Nourish and its members on each of these 11 steps. For each step we have set out both the issue as we see it, and what would be a desirable outcome in the new Land Use Strategy to address it.
Get the fundamentals right

1  **Stick to internationally agreed definition of sustainable development.**

Outline of issue:
The LUS should follow the definition of 'sustainable development' set out in the Brundtland Commission report 1981. This is based on an equal assessment of the environmental, social and economic inputs, outputs and impacts of action. It has a 30 year history of practical use and study, is internationally recognized and will ensure that each of these core aspects is addressed.

The strategy should not be based on the term 'sustainable economic growth', currently in use by Scottish Government. This view prioritizes only one pillar of sustainable development; has been in use for only 3 years; and has no wider basis for use and comparison. If the lesser definition is used it will reduce both the scope of the strategy and the range of organisations that will take a part in delivering it.

**Outcome Recommended for Final Land Use Strategy:**
To ensure longevity, the Brundtland Commission definition of sustainable development should be used in preparing the strategy. Adopting the lesser definition of sustainable development would limit the usefulness of the strategy and reduce its longevity and the strategy risks being discarded if there is a change in political administration at the next election.

2  **Food security trumps everything else**

Outline of Issue:
Among everyone we have spoken to, the issue of food security has come out as the issue that can and should be addressed by LUS. Food security is already and will become increasingly a top issue for Scotland as dwindling oil reserves global climate changes and a range of other factors begin to influence the security of the global food supply.

There appears to be no coherent strategy to improve national food resilience and security in Scotland at present. The LUS and associated policies need to be developed that will progressively improve Scotland’s ability to feed itself in the future should global food pressures increase as anticipated.

A wholly different approach is needed: moving away from dependence on the global market expansion and the trade specialisation model, and toward a model in which Scotland grows more of what we eat and eats more of what we grow. A wide range of measures will be required to do this: both long term - such as changes to cropping and diet patterns across Scotland and short term measures - such as the development of contingency plans for a range of potential future food limiting scenarios in the interim.

**Outcome Recommended for Final Land Use Strategy:**
The LUS should become the primary vehicle for changing Scotland’s approach to food security and to making Scotland’s food and diet more secure and sustainable. Food security trumps everything and LUS should put it as number one priority.

The LUS should set out legally binding targets on government, with milestones toward achieving food security in Scotland - just as similar legal targets are set for GHG emissions. The food security targets should be set at:

- a national food security target of 75% of the food eaten in Scotland coming from Scotland by 2020, and 90% by 2050. Accompanied by a national food production plan, with appropriate delivery mechanisms to achieve this.
• a regional food security target of 50% of the food eaten within each region of Scotland coming from within that region by 2020, and 75% by 2050 with Regional food production plans with appropriate delivery mechanisms to achieve this.

3 Create a robust mechanism for community based decision making on the use of land

Outline of the Issue:
There is currently no real mechanism for land use planning and delivery in Scotland. The control of built development takes place through Strategic Development Plans and the planning system. This controls land use for ‘development’ using a zoning and policy approach, requiring both prior consultation and approval, and enforceable standards. However, the other ‘undeveloped’ 95% of Scotland’s land that is not built on or used for activities that require planning permission have no coherent plan, no zoning, no prior approval and consultation over changed use, and no enforceable standards.

The lack of a coherent system of land use planning and decision making has led to unregulated and primarily economic decisions to drive land use. When landowners and developers have the sole right to make decisions about land use it often leads to poor and short term decisions that have adverse impacts on neighbours, users and the wider community. Little surprise then that much biodiversity has been lost; inappropriate forests planted, access to land limited and carbon stores disturbed and released.

During the pre-consultation meetings about the LUS Nourish members raised the issue of how to introduce a land use planning mechanisms to enable local land use decisions to be made. The discussion at all the meetings where Nourish members were present covered two issues – primacy and scale. Firstly will land use have primacy over development or the other way around? We were told that the LUS will ‘sit alongside’ the current development planning system: but no one could explain how this will work.

And secondly, land use planning is about communities making decisions at a local scale. To be real and effective it must take place at a level that the people who own and manage land can agree how the land will be used and managed with the people who live in and nearby it. Both the Strategic Development Plan and Local Development Plan processes need to address this issue in a coordinated way.

Outcome Recommended for Final Land Use Strategy:
To have any practical impact, the LUS must present new mechanisms for land use planning and decision making. The people and businesses making the changes must be required to consult and adapt their management to achieve public benefit rather than simply private gain.

This new mechanism must address land use at the community level. People identify with landscape at a local level. They need to make collective decisions and have responsibility for them at a local level. In future, in the absence of cheap oil to ship stuff around the globe, communities will need to source a greater part of their energy, food, water and other natural resources from the land close to where they live.

Nourish does not have a blueprint for a system to achieve this but we and our members would be willing to enter into a constructive dialogue with others to explore a suitable mechanism and test it at a local level.
Tackle the major barriers to sustainable land use

4 Localised food production needs to replace the long distance supply chain

Outline of issue:
85% of all food sales in Scotland are made in supermarkets, reliant on long distance supply chains. The dominance of this system has six main impacts relating to climate change, local economic development and health from food related land use:

- Farm viability: the supermarket buying practice of sourcing from producers with the lowest cost base for each product, anywhere in Europe is economically 'efficient' but completely unsustainable. It is killing smaller farms. It stops many products that could be produced in Scotland being grown here.
- Production methods: it is also leading to the adoption of unsustainable production methods – for instance the move away from mixed farms toward specialised arable or livestock units.
- Energy use: this in turn leads farmers to use natural gas to synthesize nitrogen necessitating increasing energy use. The lack of widespread adoption of on-farm renewable energy production and alternative vehicle fuels has reduced the ability of this sector to improve its long term sustainability in energy use and cost reduction.
- Transport: supermarkets necessitate that long distances are traveled between points of production, processing, distribution, retail and consumption with excessive carbon emissions. Communities also lose the opportunity of local economic development and employment in food production
- Waste: it produce more waste on farm, such as animal ‘waste’ storage problems and in the retail chain, with high levels of grade-out; and with consumers, with over-purchasing and high levels of food wastage.
- Health: an inadequate focus on human nutrition and the long term costs of food related health problems. Over consumption of over processed foods is leading to an epidemic of obesity in Scotland.

All six of these ‘side effects’ of a supermarket food system can be seen in almost every food product - take for instance milk. Scotland is at the northern limit for outdoor stocked dairy production, making it an inefficient place to produce milk compared to northern mainland Europe. Yet the price of milk to consumers in Scotland is at an historic low. What impact does this have on our land use and the community?

The pressure on farmers to minimise costs has led to animal welfare problems with cows; farm bankruptcy, and slurry waste and ammonia release problems. The consolidation of milk supply chains has led to the demise of regional dairies; the freighting of milk long distance, and the homogenisation of milk in order to increase its shelf life. This in turn is linked to a quadrupling of bowel disorders. And at a low price, consumers drink more milk and eat more cheese than is healthy for them.

In short, the recent dominance of supermarket in supplying food for Scotland has led to low consumer prices but created a whole raft of long term problems for society to deal with. Consumers realise this and are demanding more local food. So far government has paid only token heed to local food, and created a planning framework for supermarkets to expand.

Nourish and its members take the view that the long distance supply chain model we use for food - and hence land use in Scotland - is inherently unsustainable and will impact negatively on climate change, local economic regeneration and human health.
Outcomes Recommended for the Final Land Use Strategy:
Our land will only be better used; our food grown more sustainably; our food supply more secure and our health better, if the key driver for growing food in future is to meet local community need rather than to minimise costs.

The land use strategy needs to develop and deploy a different model of food supply and associated land use. This should be based on:

- Sustainable production methods – not only organic production, but also mixed farming systems and rotational land use
- On farm energy supply – with all farms encouraged to produce and sell renewable energy and where this energy includes waste heat, for the use of this to be encouraged on farm.
- Localised food distribution – in which most food is grown, processed, retailed and consumed within the same geographic area. Both to bring economic benefit to rural areas and address the growing issues of food security. Regional food production strategies should be established to encourage local production, processing and selling and the establishment of contingency production and supply systems for key staple foods.
- Avoidance of waste and the use of ‘wastes’ as a renewable resource – for instance through not adopting production systems that produce large waste streams; by using farm wastes to produce useful nutrient and energy streams; by banning BOGOF pricing offers, and by a concerted effort to reduce food waste at all levels and stages in the production process.

The LUS must tackle the system that creates unsustainable land use if it is to become the mechanism to develop and deploy a more sustainable and low carbon land use system. The current strategy of food supply in Scotland, based on the dominant supermarket supply chain model, will not realize the change required to avoid climate change and unsustainable land use. Rapid and lasting movement toward a localised food system is required.

5 Current land ownership patterns will have to change

Outline of issue:
In rural areas – Scotland has, on average, very large farms and very old farmers. It also has a very large area that is tenanted, where the land user is not the landowner. Together with low incomes, this is a major barrier to new entrants to farming, sustainable land use and food production.

The ability for new and younger producers to enter the industry are very limited. Land ownership and land parcel size are a major barrier to sustainable and climate-friendly land use, and has to be addressed. Imbalanced land ownership pattern limits the ability for sustainable land use and for the distribution of the benefits of land use.

This laissez faire approach to land use has also led to a dramatic decline in the number of people working on the land; the concentration of land ownership and, worst of all, a social divide between those who control the land and those who live on or near it. Sustainable land use can only be achieved by reversing this trend.

The rise in community ownership of land has largely been in crofting areas with low productivity land use. The register of community interest to buy land has been well subscribed, but has failed to deliver actual land ownership to communities as there are no powers to trigger a land purchase – only the ability to get first refusal should the landowner wish to sell.

Additionally, land speculation and the owning of land purely as a tradable asset has led to very high land prices in Scotland. Land values have been grossly inflated and are not related to their productive use. High prices act as a very real barrier to new entrants and community ownership, and also deafen out the market signals generated by good land uses.
Outcomes Recommended for Final Land Use Strategy:
Sustainable land use can only be achieved by reversing the trend of large land ownership and creating both smaller land parcels and a community trigger to land purchase. A new mechanism to achieve this is required. It is very likely that forced land sales would fall foul of the ECHR. The mechanism must therefore be fiscal in nature - a land value tax is needed in Scotland.

A land value tax charges land owners relative to the value of what they own - and was first proposed by Henry George. It has been introduced in parts of Australia, Taiwan and also Hong Kong. In these areas it has resulted directly in reduced land values, and also led to owners selling land to their tenants. It has also halted land speculation and a return to productive land uses determining land value.

More recently, land value taxes have been proposed to be combined with land use taxes. This varies the amount of tax levied for different types of land use with those producing desirable environmental and social benefits being taxed lower than those creating adverse impacts and resource depletion. Such a tax would be a very potent tool to guide land use change.

Since devolution in Scotland there has been active interest in a land value tax by the Scottish Parliament. A resolution advocating a land value tax for Scotland, signed by Green, Labour and Nationalist MSPs was passed in 2003. This led in 2006 to the appointment of the Burt review on Scottish Local Government Finance. The Review’s 2007 Report concludes that:

“although land value taxation meets a number of our criteria, we question whether the public would accept the upheaval involved in radical reform of this nature, unless they could clearly understand the nature of the change and the benefits involved…. We considered at length the many positive features of a land value tax which are consistent with our recommended local property tax [LPT], particularly its progressive nature.”

The potential benefits of better land use and mitigation of climate change that could be delivered by LUS, equipped with a land value and use tax, justify it’s adoption.

6 End all caged livestock production

Outline of Issue;
Some land use practices are always going to be wrong and detrimental. The clearest of these is the rearing of animals – particularly chickens, turkeys and pigs - in confined indoor rearing systems.

Enclosed rearing is a land use decision – even though it takes place in sheds – as it has impacts on land and neighbours. Scotland produces a lot of indoor reared chicken and pork and this is producing animal welfare problems; waste problems; high levels of ammonia release; neighbour odour problems; and endemic disease problems, particularly campylobacter.

Outcome Recommended for Final Land Use Strategy:
The LUS should halt all intensive enclosed rearing of animals – one of the most damaging land uses. This would:
- Create less waste
- Reduce GHG emissions
- Provide better animal welfare
- Provide healthier food products
- Further enhance the image of Scottish food – particularly its beef, lamb, pork and chicken.

By becoming an entirely ‘free range’ country Scotland would be leading the world in sustainable land food and land use.
Create the opportunity for communities to become resilient

7 Space to grow.

Outline of issue:
Despite having one of the lowest average population densities in the EU, Scotland still cannot find the space that many people want to grow their own food. The different constraints at play in rural and urban areas need to be overcome in very different ways.

In built up areas there is insufficient space in and around residential areas for people to ‘grow their own’ – more allotments, community areas and rentable land spaces are urgently required. A target per head of population (for example 10m2 per person) should be set and these areas identified within the strategy.

Around towns and cities land used to be used to feed those towns. 50 years ago smallholdings around Edinburgh or orchards in the Clyde valley, supplied food to Scotland’s cities. This land is now used for golf courses, out-of-town retail and other ‘amenity’ uses.

Outcomes Recommended for Final Land Use Strategy:
LUS needs to set out and deliver on clear targets for space to grow:

- In built up areas a target per head of population of say 10m2 per person should be set and these areas identified within the strategy;
- Around towns and cities, the target needs to be to return land nearby to feeding people in the town or city – 50% of surrounding land for local food use by 2020 and 75% by 2050

As well as setting targets the LUS needs to set out how to achieve them, and develop mechanisms to deliver space to grow. This should start with:

- A review of Greenfield policy and the Planning system to encourage increased access to land for community farming and allotments.
- A stated public policy that public land holdings lying vacant can in the interim to use be utilised on a temporary basis for allotments or similar public food growing space.
- A research and development focus towards the use of ‘flat roof space’ in urban areas for food production purposes.

8 Skills to grow

Outline of issue:

After 50 years of increasing reliance on imported foods and decline in the farm work population, there are not the numbers or breadth of skills required to both grow our own food or manage land better. This real lack of skills at several levels is a major practical barrier to sustainable land use. We can’t create a sustainable land use system without aware consumers or a better skills base.

In the past 5 years SAC has closed 2 out of 3 teaching sites in Scotland for farmers. There is no professional training provision for horticultural food production anywhere in Scotland - only amenity horticulture and garden centre management! And there is currently no policy from LANTRA or Skills Development Scotland (SDS) to deal with this. This short term perspective on food production skills is not acceptable.

A recent poll of Scottish parents of school age children showed 80% of parents want their children to be taught how to grow and cook their own food. Currently less than 10% of kids can and do.
Outcomes Recommended for Final Land Use Strategy:
Sustainable land use is about people being equipped with the skills to feed their community and look after land. The LUS needs to accept and embrace the social aspects of land use change in order to be effective.

- In schools - nutrition and food production should form a mandatory part of the educational curriculum for schools.
- In colleges – expanded and improved provision of training for land use generally and food production in particular
- In the workplace – development of local apprenticeship schemes to train new growers and offer a route to employment via local food production. (Nourish is able to offer expertise and member participation to enable this)
- In communities – a well resourced drive to increase and support food growing skills – along the lines of the rapidly ‘Grow it Yourself’ movement in Ireland. (again Nourish can assist in delivering this aspect of the LUS)

Lead the change toward what society values most

9. Develop and reward carbon friendly land use

Outline of issue:
Many current land uses are contributing to carbon emissions, leading to climate change. This is an issue with many heads:

- Many current land uses depend on fossil use to function – for power, synthetic nutrients and materials
- Many land uses release carbon doing operation – all arable barley and oil seed rape production for instance reduces soil organic matter levels, leading to carbon release to the atmosphere
- Large carbon stores are not being protected - Scotland holds one of largest EU carbon stores in peat bogs, blanket mires and organic, but there is no strategy or reward to get managers of this land to protect it
- Many opportunities are being missed to increase the stores of carbon in and on land – trees as carbon stores are being considered, but their value pales in comparison to soil as a carbon store.
- Soil managed organically has been shown to lock up more carbon than conventionally managed soil

Amazingly there is currently NO mechanism to encourage or reward land owner and users for adopting carbon friendly land use practices. The SRDP includes many options purporting in name to reduce climate change, but there are no payments linking land use to reward.

The dependence of our current land uses on fossil fuels and the lack of diverse energy and income sources is a major risk - particular to our food production, processing and distribution systems. Continuing with a carbon heavy food system adding to the increasing risk of food insecurity.

Outcomes Recommended for Final Land Use Strategy:
Carbon friendly land use should be the aim of the LUS, and requires several prongs to:
• Reduce the carbon fuel inputs required to use land
• Increasing the production of renewable energy on land
• Protect existing carbon stores
• Increasing the rate of sequestration of carbon into soils

Specific mechanisms that Nourish would support include:
• SRDP and Single Farm Payments, and their CAP 2013 successors should all be rewarding land users directly for adopting climate friendly practices;
• A review of EU VAT rules should be sought to implement VAT on low nutritional value foods with the option for hypothecation in developing a focused range of policies and funding systems for improved nutritional standards of foods, improved food security and the decarbonisation of EU food production systems.
• A more clearly focused policy within our renewable energy strategy for farm based renewable energy and carbon neutral fuel projects;
• The introduction of a PAS 2050 – carbon mark for all land derived products;
• The adoption of Carbon Friendly Food certification to distinguish truly well produced food;
• Compulsory labeling of carbon use and impacts for all processed food products – including the carbon release of the method of sale and distribution;
• Public procurement ONLY of low carbon impact products – food, timber, fish, etc.

10 Value the ecosystem services that land use can deliver to the communities

Outline of issue:
The natural environment also provides us with services which are essential for all life on earth. These ‘ecosystem services’ include

• Pollination
• Photosynthesis
• Water supply
• The maintenance of soil fertility
• Water retention and storage
• Flood alleviation
• Waste breakdown and disposal
• Carbon storage
• Sources of renewable energy

However, we rarely recognise the ecological or human health benefits of these services, or their true financial value. A study by SEPA in 2003 estimates that Scotland’s natural environment delivers ‘ecosystem services’ worth £17.3 billion every year – compared to a Scottish GDP of just over £62 billion.

The LUS consultation documents talks about the big 4 land uses in Scotland:
• Agriculture
• Forestry
• Energy
• Minerals

However, it is mistaken to assume that protecting these industries and using the LUS to maximize the growth of all four is the key to sustainable land use and climate mitigation.
The focus should instead be on protecting these industries for the future by ensuring sustainable standards for their development, addressing the interaction of economic, environmental and social interactions and objectives for each of these. Only by protecting the natural resource base we have, improving it, and then deciding what services we need our land to deliver for us and the best way to achieve it will we be able to achieve sustainable land use for the future.

LUS should not be a ‘carve-up’ of land use among the ‘big four’ industries. It should identify what services society wants and need with respect to land use in Scotland to supply, and then create a framework for all sorts of players including businesses, communities, individuals, to deliver those services through sustainable land use practices.

**Outcomes Recommended for Final Land Use Strategy:**
A core aspect of the LUS should be based on an ecosystem services approach. This will require using contingent valuation of these services to inform land use decisions rather than using short term market indicators. The real value to Scotland of land use is the services it delivers free to us, and the sales of land products are dwarfed by comparison to this service value.

The types of key services that Nourish members have identified of being of greatest value – but are often used free of charge are:

- Access to growing space
- Fresh water
- Carbon sinks
- Renewable energy production
- Outdoor recreation
- Affordable housing

LUS needs to use ecosystem service use as the basis for measuring good land use.

### 11 Lead the way toward healthy soil management

**Outline of the Issue:**
Soils are a critical asset requiring constant management to maintain soil health and productivity. With the creation of new soils occurring at something like 1mm per 100 years and a range of factors reducing soils including erosion, soils are currently on average only 300mm deep! Other changes over time include a progressive loss of mineral and organic status with implications for soils structure and productivity. The loss of minerals over time can have serious consequences for the quality of animal and human nutrition. There needs to be a long term goal to improve soil health.

**Outcomes Recommended for Final Land Use Strategy:**

- A research strategy should be established to evaluate the options to improve and maintain the status of Scottish soils in terms of structure, organic content and mineral content. This should aim to develop measures to incentivise improvements in soil quality including:
  - Developing means to reduce our dependence on synthesized nitrogen such as the use of clover and other natural nitrogen fixing methods.
  - Determining ways of encouraging mixed farming, with closed nutrient cycles.
  - Reduce soil losses from a range of erosion factors.
- Encouraging local recovery and processing of food waste and other suitable materials back to the land via local processing capacity (composting and anaerobic digestions).
- Developing measures to encourage the local authority and the private sector waste industry to utilise small scale on farm AD and composting as a means of diversifying agricultural activity and providing local soil nutrient cycles and the use of waste heat from AD for on farm food production.
- Ensuring maximum uptake of the PAS 100 and PAS 110 standards for compost and AD digestate quality.