

Establishing an agriculture knowledge and innovation system in Scotland

First Stakeholder Consultation (Edinburgh) on the 18th of January 2023

Workshop report

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1. Overview

What we did

Following on from our workshop in Edinburgh on the 18th of January 2023, the **purpose of this document is to act as a bridge into the next stage of this consultation process.** In total, representatives from 17 industry stakeholders, 7 Scottish Government representatives and 3 international AKIS experts (Belgium, Ireland and Sweden) participated in the workshop.



The workshop was divided into three main activities. The morning was spent **hearing from international colleagues** regarding AKIS in their respective countries, as well as **mapping our current AKIS and an imagined future AKIS.** This engendered discussion and debate around what an AKIS is, who the actors in an AKIS are, who the beneficiaries are or should be, and how this can work in practice. In the afternoon, a round-robin activity was used to explore three areas with the **aim of generating 'options' for a future AKIS in Scotland,** as detailed below:

- *Bridging the gap between research and farming practice*
- *Linking traditional and non-traditional actors*
- *Support and incentive schemes to support a future AKIS*

Throughout the activities, Hutton facilitators were recording these discussions. This document is a **synthesis of the group outputs and facilitator notes.** For the purposes of creating a logical and readable document with which it is possible to engage, **information has been organised into relevant themes** and divided into 'challenges' and 'options'. These themes were:

- *AKIS beneficiaries*
- *AKIS concept and objectives*
- *AKIS governance, data and funding*
- *AKIS structure/bringing different actors together*
- *Farmer uptake of advice*
- *Bridging the gap between research and farming practice*
- *Education and ongoing skill development*

At this stage, it is important that this information retain as much of its original essence as possible to capture the specific messages that were expressed; as such, minimal processing has taken place.

What's next?

The next stage is to engage with this document and, where possible, to further contribute to the options that have been identified in this workshop. This process will be facilitated online using a Miro board. The focus is now on identifying 'options' for the new AKIS – means to address the challenges identified in the workshop and to move towards an imagined future AKIS. Another way of conceptualising this process, as identified by a workshop participant, might be first to imagine the desired outcome and work backwards from there.

The options generated, both from this process and from a wider literature review, will be formally appraised against assessment criteria by the Hutton team. **The most promising options will then be presented at regional workshops for stakeholder evaluation.**

2. Working towards options

AKIS beneficiaries

In the future, it was envisioned that the Scottish AKIS would have a wider range of beneficiaries. For some, this meant land managers in the broadest sense of the term. There was a general sense that society should have more influence on the future direction of farming (environmental goals, climate protection, peatland restoration, etc.). Below is a list of the suggested beneficiaries:

- the public/communities
- land managers (e.g. foresters, carbon credit seekers, rewilders)
- crofters
- tenant farmers
- new entrants
- asset management corporates, e.g. forestry, carbon traders
- smallholders
- advisors
- member organisations
- agricultural and other students
- NGOs who own land
- large estates
- women in agriculture
- urban farms
- part-time farmers
- wildlife

AKIS concept and objectives

Challenges identified

- We need to consider how we conceptualise advice and its role; should the farmer be in the middle?
- If we are going to redesign the system, to what end? What are we trying to achieve? There are multiple audiences and it's not simple to answer. What is the purpose of the system? We need a rich picture of the system.
- We need to recognise that there are very different mental models of the problem we're trying to solve
- Future direction of AKIS needs to be clarified; overall goal is not clear. We need a clear methodology for exploring this
- It's hard to know what the goals are when we don't yet have new frameworks in place in terms of biodiversity and climate change
- The implicit messaging of the diagram with the farmer in the middle is that the farmer has got to do something differently – all the pressure is on the farmer. All actors in the system need to change. As such, the conceptualisation around what the new framework should look like is very important
- Need clear objectives for AKIS; which outcomes should it deliver (e.g. reduced emissions, enhanced wildlife). How can policy support an integrated approach?
- Needs to fit in with overall strategic direction for Scotland PLC
- Needs to deliver value for public money
- Needs to deliver public goods
- Needs to meet sustainable development goals
- Need clear objectives for AKIS; which outcomes should it deliver (e.g. reduced emissions, enhanced wildlife)? How can policy support an integrated approach?



Working towards options

- The value of the soft system methodology; it can identify tensions in the system
- Viewing farmers as customers
- There must be consistent link to vision of the future food system
- Start with the outcome we want

AKIS governance, data, and funding

Challenges identified

- Easier access to information and data from supermarkets is needed
- We need to ensure an information flow to farmers about the effects of subvention programmes
- Competing signals, beneficiaries potentially pulled in different directions by different drivers, market/consumer vs sustainability policy; market pull versus policy direction; conflicting aims and expectations
- Scottish Agri food plc needs to be efficient and cohesive
- What happens when projects end? For example, KTIF is a multi-year project. How can the results be mainstreamed and the learning shared at the end of projects; we need long term evaluation of programmes and data on their effects; support is often short-term, project-led and therefore fragmented
- AKIS needs to have an identity (quite a few participants not aware of the term and there are not currently opportunities for all the actors to get together)
- There is suspicion within the crofting community regarding the need for advisors in every context. The policy environment shouldn't be so complex that you always need an advisor.
- How to create an adaptive/flexible system that can take a long-term view; how can we move towards long-term land management; how to deal with land under tenancy
- Developing consistency in messaging

Working towards options

- Need to agree accreditation on which benchmark tools to use, for example, Agrecalc is accredited. Could Agrimetrics play a role in terms of standardisation, tools, comparability?
- Data has a central role; need more access to data; maybe opportunities to learn from other sectors in order to create good baselines across different areas.
- The knowledge is driven by the retail sector and should government's role be to catch the tail of those aren't engaged with buyers in the same way? Private sector is leading knowledge through the supply chain. Much of the knowledge comes from the buyer, for example, Tesco for larger farms
- Examine the stages of funding; test business readiness of funding; is it fit for purpose?
- Need multi-year funding agreements to provide a more joined up and long-term approach. An overall funding programme could have multiple financial contributors, rather than having siloed pockets of money
- Do we need an AKIS oversight board and what is its possible role?
- The idea that there should be regular AKIS meetings was discussed because it was such a good way to bring important actors together, increased their awareness of each other and the concept of an AKIS

- Would be good to have an annualised calendar of events following the rhythm of the year so people know what to expect when, and can plan accordingly
- We need to align government priorities with skills
- International feedback to programmes
- Look at the FAS business plan and consider the KTIF in this context
- “Innovative Farmers” programme runs over four years
- Funding for research on systems change through a farming organisation

AKIS structure / bringing different actors together

Challenges identified

- More links needed between the different actors in the future; research and consultancy are currently separate from each other
- We are missing links between AKIS actors to policy makers
- The whole AKIS needs to be more integrated, with arrows going both ways. Links between organisations are varied: some are two-way; some are broken
- Education, extension/training and research need to be together; many of the organisations are involved in all three domains but they still remain relatively siloed. Leadership of these organisations needs to be strengthened and needs to ensure more cohesion (in research, education and extension)
- Need to be careful of overlap and duplication; farmers may be aware of all the actors involved in an AKIS, but how aware of each other are the actors of each other? Is there an awareness of where the research/advice is coming from? What about conflicting advice?
- We need better coordination of knowledge exchange between institutions and better linking of KE to AKIS
- Rural broadband an issue, connectivity will become even more important in the future
- There is a clear divide between farmers and rural communities
- Representation of under-represented groups/non-traditional farmers and more opportunities for; their stories need to be heard. Groups mentioned: women, smallholders, part-time farmers, crofters, horticulture
- We need to find common language among AKIS actors
- We have to involve non-farming people (with business skills) into farming. We need overlaps to other sectors of economy (engagement of other sectors, inspirational thoughts, ideas, best practice). More non-traditional skills are needed in the farming sector (expertise from other sectors, business skills etc.).
- Better understand the role energy suppliers (currently not that visible but very influential when on-farm energy transition to renewable energy is ongoing)
- Disagreement regarding the best source of advice. Some think the best advice is independent of suppliers; others argue that this is the advice that farmers are most likely to engage with. There is a view that independent advisors understand best what’s actually happening on the ground.

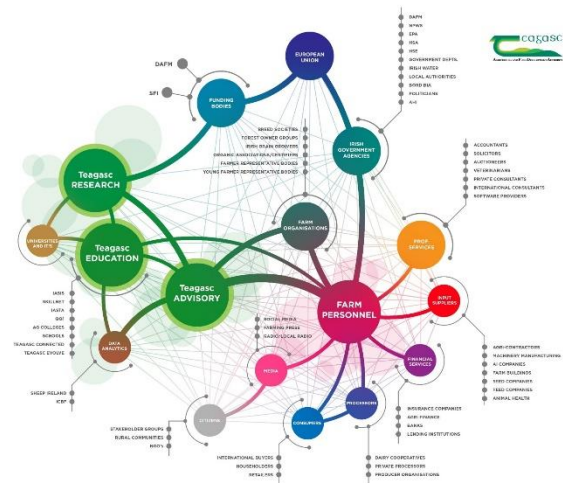


Image: Teagasc

- Plugging gaps in advice e.g. ecosystem services
- Availability of high-quality local advice very important

Working towards options

- Actors who are regulators could be grouped together e.g. SEPA. But need to be careful of over-integrating – don't want to end up like Belgium. Don't want a scenario where the value of different organisations is not recognised
- It is the responsibility of all to get involved/connect with each other
- Monitor farms have done a good job of addressing wicked problems – they are doing really well. This concept should be expanded, with specialists invited, more organisations brought in. They are a good model for what's going well. They bring in experts and also take experts into different situations.
- FAS connect works well. Groups of 6-7 form connected by a WhatsApp group. The groups are self-selecting and decide their priorities. Financial support attached to enable visits and speakers etc.
- Social media influencers could have a role (domestic and out of Scotland, (e.g. the Sheep Game). Also, the Filming on our Farms initiative. The role of social media is likely to increase in importance. Farmers will get advice from actors that may not be part of AKIS
- Non-traditional communication techniques
- Innovation specialists are needed to speed up on-farm adoption process
- More attention to mental health of farmers (they are under enormous pressure), farmers must be respected for what they do (behavioural change in the society is needed).
- Intersectoral placements (and international experience – Ranching for profit) would be good to gather experience
- Farmer business groups would be helpful
- Knowledge transfer need to be stronger (transition of knowledge is crucial); we need to involve knowledge groups, e.g. dairy groups in Ireland
- Farmers don't like being told what to do; peer-to-peer solutions/networks are the way forward; more support for this is needed; they require funding and proper expert facilitators to make them work; the Irish Dairy Coops are doing well in this.
- Social activities as incentives, including opportunities to gather around food
- Researchers/intermediaries should not be embedded within a lobbying organisation is important (e.g. NFUS); a lot of organisations rely on being distinct from the NFUS, e.g. environmental Good communications will be key
- A way of dealing with impostor syndrome for new entrants and women, and other groups who may be marginalised could be, for example, family friendly events where childcare is provided

Farmer uptake of advice

Challenges identified

- The availability of funding may be driving people to particular advisors
- Much time can be spent applying for pockets of money. if unsuccessful there is little or no feedback
- No overview of current incentives for farmers; it would help to have this
- There is suspicion within the crofting community regarding the need for advisors in every context. The policy environment shouldn't be so complex that you always need one.
- Conflicting advice
- Meeting farmers objectives: profit/ cash flow, cultural and societal, the view of peers-can be a complicated mix



Working towards future options

- Farmers need to be able to fail and learn in meeting the desired objectives; not be penalised
- £200 CPD payment available to farms is the National Test Programme phase one to encourage uptake
- Linking compulsory CPD to payments to force so-called 'laggards' to the table
- 1:1 support available via Ricardo for farmers and crofters which provides up to 1200 pounds every two years
- DEFRA project on farm resilience - a two-hour meeting with an adviser is funded. The advisor had discretion to recommend and fund follow-on activities
- Create a central funding pot, or a simple way to navigate all the different funding
- Social activities as incentives, including opportunities to gather around food
- For a FAS, a consistent point of contact is needed – the same phone number and webpage that doesn't change for years. Flexible enough to adapt but certain things are always the same
- Supporting high risk/ high reward trials

Bridging the gap between research and farming practice

Challenges identified

- Research sits in silos
- Much of agricultural research done is never taken out onto the farm; it is irrelevant; researchers don't know what's needed on the ground
- Qualitative research, often just going in and asking the questions determined by policy; just off the page; farmers can't see relevance; sometimes not appropriate; need a means to address this
- Researchers are often poor communicators

- Problems in all areas of research (e.g. social, legal, natural in terms of ease of interpretation)
- Research providers and knowledge facilitators are separate
- Researchers not incentivised to pursue applied agricultural research
- Doing quality research: qualitative vs quantitative social research; quant is easy but so many assumptions; qual much better but is so expensive, more so in current climate, providers prices have gone up
- What universities, governments and farmers want from researchers is very distinct
- How can the lag from research to field be shortened?
- Research culture: motivations not aligned. The motivations of researchers, farmers and supermarkets are not aligned
- How many in research are actually gaining post-graduate agricultural qualifications and where are they doing it? How many are actually in Scotland. How are the courses in Scotland being designed?
- Food and farming research areas not high up on the priority list in terms of research funding
- Going forward, there's only more to come in terms of pressures on research to publish etc, with university funding issues
- How should "laggards" be dealt with? Will they change? Is it worth the effort trying to change them if they have shown that they won't change and aren't contributing?
- Research approach can be patronising, the process needs to go both ways, working together to find solutions; can also be an intimidating process for researchers

Working towards future options

Research relevance

- Research should be concerned with identifying key issues for farmers in order to make research relevant; this could be done through monitor farms; invite researchers
- When defining objectives, both researchers AND funders need to be involved
- Need for more data linkage, open data – e.g. National Safe Haven. More sharing between researchers, better awareness of what's been done/what's going on
- Farmers should sign off/peer review on academic research.
- Earlier input on research from farmers is needed: it should not be about 'sharing' our knowledge/research with them; it should be a cocreation process. Funding is an issue here. DEFRA does this through the Farming Innovation Programme. This is a particular political approach and it has high approval. This is possible through UKRI in Scotland but at present requires partnership with an English organisation.
- Consulting with organisations such as RSABI before going in and deciding research questions, or at least how to approach the farmers, taking into account mental health and other issues; this would be reputationally very positive as well
- Farmer stakeholder groups are a very positive thing in Ireland; come in biannually; informs research and builds understanding/relationships; these have to be constructed carefully/participants chosen carefully
- Farmers need/want research from a business perspective; consider model from this perspective



- SRP newsletter is great; summarises research, has pictures and is easy to read; received great feedback. If more info is needed or wanted, they can ask for it.
- A portal or easy-to-search catalogue which is regularly updated and which can be searched by word or topic (easily navigable), that any actor can upload to; this could result in huge volumes of information; would need technological solutions for collating; storage could be an issue
- The Soil Association exchange is an example of getting research out onto the farm – advisors who go out and talk to farmers
- Only certain people in these research organisations have the appropriate communication skills to act as intermediaries – they need strong engagement skills and just a high-level knowledge/understanding of the research at hand; it's also important that these intermediaries have the skills to take back knowledge from the farmers; it needs to be a bidirectional process
- Subject specialists/intermediaries/knowledge brokers are very important in terms of bridging the gap between research and farms; link researchers with practical needs (SEFARI?); having a team of subject specialists; the researcher is not necessarily the one to translate for farmers
- We could widen our ideas about who research providers are, e.g. RSPB, NFFN

Incentivising/enabling applied agricultural research

- Research providers need to know where they sit in the AKIS – what's my role, where do I sit in the vision and how do I contribute – especially for early career researchers. Having this would create a cohort; early-career researchers and older researchers are measured on different metrics
- Change the metrics research is evaluated on; different ways to measure impact factor; other proxies: farm visits, plain-English interpretations; still very hard to measure actual real-world impact as this is all a process and not easy to connect the research to any changes that are made
- Academic drivers: marketability should be linked to plain-English summaries; provide lay summaries of research
- Ag researchers need a defined career path which encourages applied research and engaging with farmers; not just publishing
- SEFARI, few have heard of it; how to resolve: workshops, fellowships, partnerships; is it a funding issue?
- Researchers need to change their approach. Effective listening is something that needs to be a priority. They need to be more open about their limitations and happy to say when they don't know.
- The government has to pay for applied research as it is not going to pay for itself through the usual research channels
- Enable commercialisation of research
- Get the private sector to pay for applied research; it's in their best interests for the farm to do well; the researcher is not concerned about the farm as they are focussed on publication; an issue here could be that the private sector wouldn't cover all areas/would have an agenda or wouldn't be motivated to share this research; could also be undermined by short-term vision and wanting to do research that is easily commercialised; perhaps the government could step in here

Education and ongoing skill development

Challenges identified

- Need better links to tertiary education, for training knowledge and skills
- Formal education does not necessarily reflect policy ambitions (Scotland to be global leader in regenerative and sustainable farming). This is not being delivered by conventional programmes
- Research vs KE person; very different skills; research needs people skills

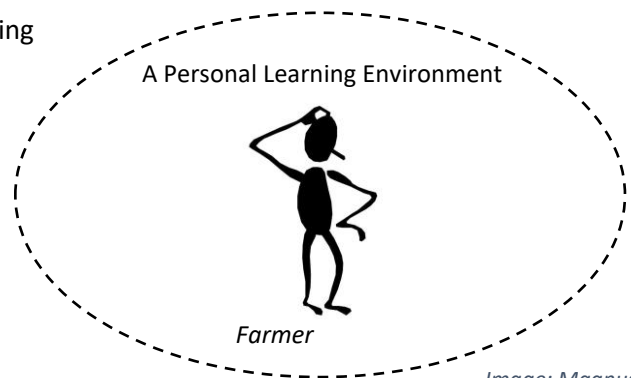


Image: Magnus Ljung

Working towards future options

- Development of core modules to be delivered by educators
- The education system should be improved to become world class. Many students are now opting for Reading and Newcastle; they are seen as progressive places to study agriculture and must be doing something really well. Can we learn from them?
- Apprenticeship standards should be more developed
- Better translation of policy into practice via education of young people at school, college and university
- Ongoing CPD (research-based) for advisors
- Incentives to upskill advisors
- Facilitation skills for those delivering advice/brokering research; it is the role of EXPERT facilitators to support farmer groups; formalised support for expert facilitation is needed
- Advisor skillset: social skills paramount; understanding farmers as people; emotional intelligence; advisors already have this; can we ensure researchers have these skills?
- Researchers need to change their approach. Effective listening is something that needs to be a priority; soft skills; they need to be more open about their limitations and happy to say when they don't know.

Appendix 1: Event agenda

Establishing an agriculture knowledge and innovation system in Scotland (AKIS).

First Stakeholder Consultation

COSLA Conference Centre

Verity House, 19 Haymarket Yards, Edinburgh, EH12 5BH

18th January 2023

Objectives for workshop:

- Learn from European perspectives: AKIS in comparable countries
- Establish common ground on the current structure of AKIS in Scotland
- Identify features of ideal AKIS in 2033
- Identify options for connecting the research & knowledge base to AKIS
- Generate options for linking up traditional and non-traditional actors
- Explore how AKIS 2033 could connect to support schemes

Agenda:

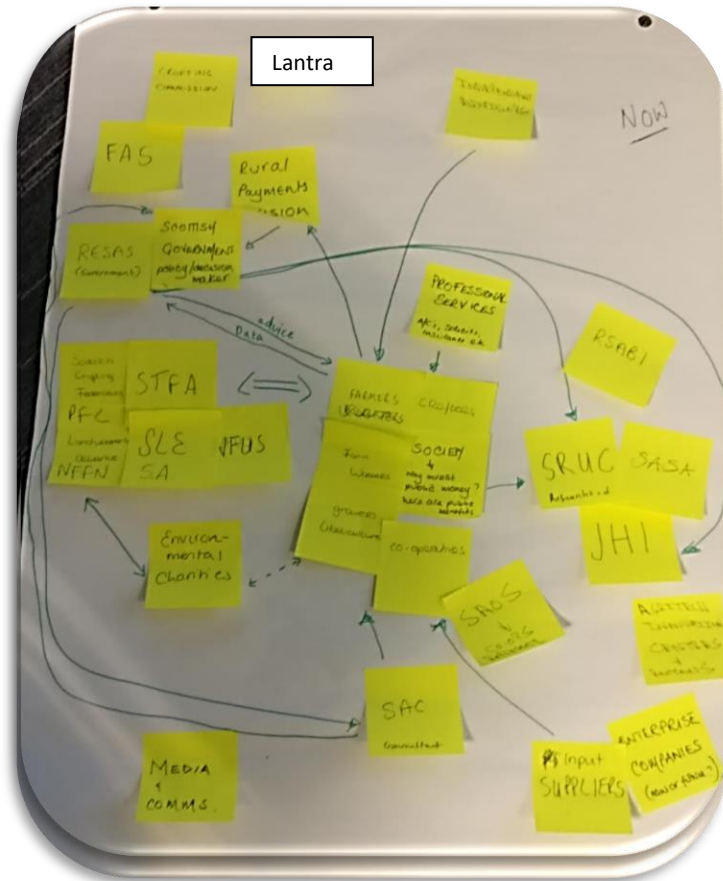
- 0930 Tea & coffee
- 1000 Introduction and icebreaker
- 1015 Structure of AKIS in different countries: short presentations, question and answer
- Marleen Gysen – Senior Climate Consultant, INNOVATIESTEUNPUNT (Innovation Support Centre for Agricultural and Rural Development), Belgium
 - Thomas Curran, Head of Teagasc Advisory Service, Ireland
 - Magnus Ljung, Principal Extension Specialist, Swedish University of Agricultural Sciences, Sweden
- 1115 Mapping the current AKIS in Scotland
- Group consensus building activity: *What is the current structure, who are the beneficiaries, who are the actors, what are the outcomes, what are the existing support schemes?*
- 1145 AKIS 2033
- Small group visioning activity: *What should AKIS 2032 look like? What are the desired outcomes? What is the scope? What is out of scope? Who are the beneficiaries?*
- 1230 Lunch
- 1315 AKIS 2033 – Group feedback and discussion
- 1400 Working Groups
- Working group 1: How can research and knowledge providers be connected into AKIS 2033?
 - Knowledge providers include universities, major research providers
 - Working Group 2: How can AKIS 2033 link traditional and non-traditional actors?
 - ‘Non-traditional actors’ include financial services, input suppliers, processors as well as third sectors, EU thematic networks and associated projects
 - Working Group 3: What support/incentive schemes could support AKIS 2033?
 - Supports/incentive schemes include those available through Scottish Enterprise, Highlands and Islands Enterprise, supports for sustainable and regenerative agriculture, climate mitigation, nature restoration
 - What unintended consequences do we want to avoid?
- 1500 Group Feedback
- 1530 Conclusions and next steps
- 1545 End

Appendix 2: Event participants

Name	Organisation/Affiliation
Sarah Govan	Edinburgh Climate Change Institute (ClimateXChange)
Gordon Jackson	Scottish Government Agriculture Policy Division
Heather Holmes	Scottish Government Agriculture Policy Division
Stephanie Weir	Scottish Government RESAS
Lauren Johnstone	Scottish Government RESAS
Christina Coakely	Scottish Government RESAS
David French	Scottish Government RESAS
	INNOVATIESTEUNPUNT
Marleen Gysen	(Innovation Support Center for Agricultural and Rural Development), Belgium
Thomas Curran	Teagasc Advisory Service, Ireland
Magnus Ljung	Swedish University of Agricultural Sciences, Sweden
Kirsty Hutchison	NatureScot
Darrel Crothers	SEPA
Jane Atterton	SRUC
Chloe McCulloch	SAC Consulting
Caroline Wood	Ricardo
Philip Skuce	Moredun
Julia Latto	Scottish Enterprise
Doug Bell	Scottish Tenant Farmers Association
Matthew Steel	NFUS New Entrant Forum
Miranda Geelhoed	Scottish Crofting Federation
Andrew Midgley	RSPB Scotland
Bruce McConachie	QMS
Nikki Yoxall	Nature Friendly Farming Network / Pastures for Life
Johnnie Balfour	Nature Friendly Farming Network / Pastures for Life
Pete Richie	Nourish Scotland
Andy Evans	CHAP
Derek Stewart	James Hutton Institute
Organising team	
Lee-Ann Sutherland	James Hutton Institute
Antonia Boyce	James Hutton Limited
Stanislav Martinat	James Hutton Institute
Esther Banks	James Hutton Institute

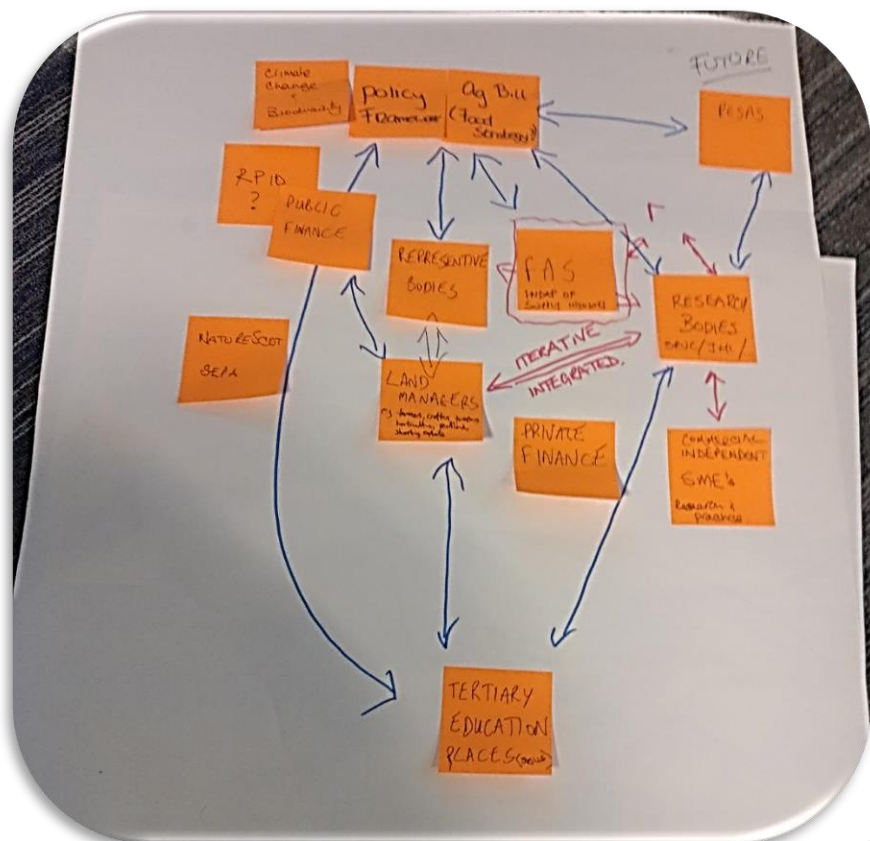
Appendix 3: Outputs from AKIS mapping exercise

Group 1



Current AKIS map

Future AKIS map



Group 2



Current AKIS map



Future AKIS map

Group 3

