



ENVIRONMENT, NATURAL RESOURCES AND PLANNING DIRECTORATE

POLICY OPTIONS SUMMARY DOCUMENT

Annex A: Policy Options for the Provision of Chicks for Egg Production

Section 1: General information

1.1 Background

- Prior to divestment of the poultry unit into the private sector, SHG was the sole provider of laying hens. Parent stock were held at Scotland and the eggs incubated. Production in 2009 had hit rock bottom and the island was reliant on imported 'fridge' eggs. The poultry unit was regenerated in 2011 by the importation of a new commercial hybrid, the Lohmann Brown. Point-of-lay parent stock were freighted on the *RMS* from the UK and by 2012 egg imports had been eliminated.
- With the removal of UK trips from the *RMS* schedule, replacement of the parent stock switched from importing point-of-lay chickens, to embryonated (ie: fertilised) eggs. Although logistically challenging and inefficient, as embryonated eggs have a limited fertile life and had to be conveyed from Germany via the UK to Ascension and thence by *RMS* to St Helena, this was mainly successful in resupplying the unit with parent stock.
- In 2014 the operation of the poultry unit at Scotland was contracted out to Mr Rodney Yon, with the intention of both supplying eggs for the retail market, and pullets for the island. Specific targets were set to be met. A combination of circumstances caused these targets to be missed, and the island once again became dependent on imported 'fridge' eggs.
- By 2017 the island was again almost wholly reliant on imported eggs. Imported eggs are of poor quality, sourced from low welfare battery units (banned in the UK), and – as with all imports – take money offshore rather than circulating it in the local economy. The price of local eggs reached £4.50 to £5/dozen, making them unavailable to those on low incomes, and reducing egg consumption island-wide. Yet eggs are a staple commodity, now promoted by organisations such as the British Heart Foundation and the NHS as an important dietary component, rich in vitamins, minerals and trace elements, a healthy source of protein, and containing 'good' cholesterol - a switch from former mistaken beliefs.
- It therefore became incumbent upon SHG, promoting a healthier community and more vibrant economy, to intervene in the supply of laying chickens. To this end on 1st September 2018 the first batch of 1,000 day-old Dekalb Amberlink chicks was imported by air. By law, and for good reasons of biosecurity, the chicks spent 4 weeks in Rupert's quarantine station, cared for and reared by the Veterinary Section, ANRD.
- To date, 4,000 day-old chicks have been imported. The price of eggs has been greatly reduced, consumption has increased, and egg imports have largely been eliminated over the last 9 months. The supply of pullets to all on a first come first served basis has led to

a restructuring of the egg market, with less in the retail sector and more in the informal economy.

1.2 Key Limitations or Constraints on Options Analysis

- Evidence of the problem/opportunity:
 - Layers have a limited productive lifetime and need to be resupplied;
 - Eggs are a healthy dietary staple and should be affordable for all (SEDP Objective 'Promote quality of life');
 - Limited egg supplies result in inflationary price rises and the importation of poor quality fridge eggs (SEDP Goals 'Avoiding high inflation' & 'Import substitution').
- The range of options considered:
 - Importing point-of-lay pullets - either (i) layers or (ii) parent stock to produce layers;
 - Importing embryonated eggs for incubation;
 - Importing day-old chicks;
 - Combination: import day old chicks + parent stock for key producers (smooth supply of replacements);
 - For all - private sector or SHG or both?
 - Subsidised or full cost recovery?
- The criteria used to assess options:
 - Ease of implementation;
 - Cost;
 - Resources;
 - Efficiency/speed;
 - Impact on economy;
 - Risk of Not Achieving the Policy Objective.
- Assumptions underpinning this impact analysis:
 - Availability of supply for different options and sources affected by disease outbreaks such as avian influenza, Newcastle disease and Covid-19, the name 3 actual examples;
 - Imports reliant on existing transport connections;
 - Cooperation of suppliers and exporting authorities.
- The quality of data used for the options analysis and impacts:
 - Previous initiatives when SHG ran the poultry unit and import substitution has been achieved, combined with animal census data, indicating approximate pullet requirements to achieve import substitution;
 - World data on expected daily per capita egg consumption – but note wide cultural variations. Per capita egg consumption is also heavily influenced by price and availability;

- Limited to no data from the informal market in eggs, mainly observational;
 - Limited to no data from commercial egg producers – no legal leverage to demand it;
 - Limited data from the retail market in eggs – no legal leverage to demand it;
 - Overall data is primarily qualitative rather than quantitative. Feedback given by Egg Producers Group – inevitably weighted to their viewpoint - and that obtained by oral consultation with retailers and members of the public.
- Limitations with regards to consultation on the policy options:
 - Stakeholders are commercial producers, small holders, retailers and other members of the public (consumers). Consultation is biased towards the more accessible stakeholders, namely commercial producers and retailers, whereas the majority stakeholders are the consumers. The supply of eggs is intended to benefit the majority, not the minority. Ensuring a consistent supply achieves import substitution, food security and benefits the health and wellbeing of the whole populace (as per the SEDP), and should not be just a policy to support the commercial business of egg production, especially as the informal non-commercial egg market is key to achieving these objectives.

Section 2: Problem/Opportunity Definition and Objectives

2.1 The Policy Problem/Opportunity

- The supply of chicks is not a 'core' SHG service and although SHG's ENRP Directorate intervened to supply the Island with chicks over the last 18 months, there is a need to establish a policy option to meet the Island's demand for chicks over the medium term.
- Consideration must therefore be given to what extent SHG should be involved, but also the drawbacks of leaving the operation to the private sector in light of the island's high overheads (such as freight charges), and lack of economies of scale.
- In this context, to what degree should any activity be operated by SHG or the public sector? To what degree should it be subsidised, either directly through financial support to the private sector, or indirectly, by the involvement of SHG acting as the initiator or catalyst?

2.2 Those Affected and How They Are Affected

- **Egg producers**, both commercial operators and small-holders, through having medium-term arrangements established for access to chicks for egg production. Ideally they need to cull chickens when they exceed their productive life and replace them with fresh stock. Realistically, this would require a steady flow of replacement pullets, only achievable with on-island parent stock and an incubator/brooder unit. This was the arrangement run by SHG before divestment, but no longer exists. Alternative options are 'lumpier', supplying replacement pullets in groups and requiring producers to accept replacements simultaneously. How 'lumpy' supplies are depends on the frequency of importing replacement stock (in whatever form). More frequent smaller numbers are better, but far more costly per chicken and a heavy burden on resources such as carrying out 4 weeks quarantine. Less frequent larger numbers are lumpier, but spread overheads and so cheaper per chicken and less burdensome on resources.

- **Private sector** through a small business opportunity to supply the market from time to time with chicks. This requires **either**: (i) purchasing, importing, quarantining then maintaining parent stock, plus the purchase of incubators and brooders, **or**: (ii) purchasing, importing, incubating, brooding chicks from embryonated eggs, **or** (iii) purchasing, importing, quarantining and rearing day-old chicks. SHG may or may not be partly involved to subsidise set up costs, as the overheads are high. **Or** an alternative (iv) is to cross local cockerels with existing imported commercial layers to enhance the egg laying genetics of offspring, still requiring an incubator/brooder unit, but avoiding import costs and quarantine. Productivity may be diminished.
- **Consumers.** The egg is now acknowledged as an important dietary staple, rich in nutritional essentials. An even supply of eggs would maintain a reasonable price and availability for all.
- **Agriculture Division of the ENRP Directorate** through establishing provisions for continued access to chicks for egg production for both business and smallholder requirements. Importation of day-old chicks applies a heavy burden on veterinary staff, with out-of-hours attendance at the Rupert's quarantine unit 7 days/week for 4 weeks. The previous 4 x 1,000 imports meant greatly extended working hours over 4 months within a 12 month period. Time-off-in-lieu (TOIL) subsequently taken translated into extended staff absences from day-to-day work. Substituting TOIL with financial compensation in the form of overtime payments would mitigate the impact on the veterinary service and support staff morale. However, over-frequent imports (for example smaller numbers more often) would overstretch resources and prove unacceptable for staff morale. An alternative is to out-source staffing of quarantine, but at an enhanced cost to SHG.

There are, in addition, different budget implications for different options.

2.3 Policy Objectives Sought in Relation to the Identified Problem/Opportunity

The objective(s) we are trying to achieve with a medium term supply option:

- Import substitution (SEDP);
- Food security;
- Support egg producers by keeping their stock productive and commercially viable;
- Supply a nutritious dietary staple island-wide at an affordable price (SEDP);
- Create income to circulate in the economy (SEDP).

Section 3: Options Identification

3.1 Options Considered

Options that have been considered, the decision criteria used to assess them and their pros and cons:

A: RESUPPLY OPTIONS

1. DO NOTHING (STATUS QUO)

PROS:

- No direct budgetary impact. No use of SHG resources;

- Ease, placing reliance on private sector to import;
- True market forces allowed to prevail.

CONS:

- Loss of import substitution (counter to SEDP goal);
- Money goes offshore with no local injection into economy;
- Imported 'fridge' eggs from RSA battery units – poor welfare banned in UK;
- Imported eggs of poor quality;
- Imported eggs less biosecure (note Newcastle disease outbreak which came from imported poultry meat or eggs from RSA);
- Inflationary (counter to SEDP) - increased price of good quality local eggs (previously £4.50 to £5 a dozen) making them unaffordable to low income groups;
- Reduced egg consumption, when now heralded as important nutritious dietary staple;
- Market in eggs almost entirely retail with little informal economy (the informal economy of egg bartering/gifting/selling allows people to make ends meet);
- No local food security in the event of severed supplies eg: as has happened: outbreak of avian influenza in RSA, and Covid-19.

2. DAY OLD CHICK IMPORTS VIA PRIVATE SECTOR

PROS:

- Day old chicks are relatively cheap;
- Fast and efficient;
- Reduced cost to SHG budget (if not subsidised);
- Removes burden of 4 weeks quarantine and prolonged hours 7 days/week from SHG Vet Section employees;

CONS:

- Choice of operator more likely to become political issue regarding control of supply and encouraging monopolistic practices;
- Quarantine is mandatory for 4 weeks. Questionable if private sector can operate quarantine to acceptable level – requires training and supervision, and will still have to be supervised by SHG;
- Places all pullets into formal commercial egg market, with minimal extension into the informal non-commercial market, reducing availability of eggs for all;
- High overheads, especially if imported in small numbers, unless commercial operators form a cooperative;
- If single operator importing large numbers to reduce overheads, creates a commercial monopoly controlling supplies with negative impact on price and the widespread provision of layers (and therefore eggs) to the island;
- Cost of quarantine – equipment, disinfectants, cleaning, feed, electricity, transport, repairs, vehicles, labour, fowl pox vaccine – previously borne by SHG, to be borne by private sector, and is disincentive (unless subsidised)
- If unsubsidised, expect impact on provision of pullets, the supply of local eggs and degree of import substitution etc.

3. DAY OLD CHICK IMPORTS VIA ANRD

PROS:

- Day old chicks are relatively cheap;

- Fast and efficient;
- Quarantine performed properly, safeguarding biosecurity;
- Day old chicks are initially delicate - Vet Section has accumulated experience on how to rear and adjust feeding/heat lamps/day length (using timer) for best survival rates, as well as administering fowl pox vaccine;
- Can prevent monopolistic approach to the supply of chicks as SHG would control distribution policy;
- Consultation with stakeholders can ensure an equitable approach to distribution of pullets, but with an eye to the greater good of the island as a whole.

CONS:

- Commitment of Vet Section SHG employees for out-of-hours work 7 days/week for 1 month. This has previously impacted morale as it is unpaid and demanding both physically and socially;
- Cost of quarantine – equipment, disinfectants, cleaning, feed, electricity, transport, repairs, vehicles, labour, fowl pox vaccine – impacts budget;
- Distribution policy more likely to become a political issue. There are always winners and losers.

4. IMPORTING POINT OF LAY PULLETS (POL)

Importing POL pullets – as has been done previously on the *RMS* from the UK - is not legally possible by air and has become unavailable on the *MV Helena* due to action by the South African authorities. The *MV Helena* anyway has a very limited capacity for live chickens approximating 70 to 100 pullets per voyage, which makes any such scheme costly and inadequate.

5. IMPORTING EMBRYONATED EGGS FOR INCUBATION (EXCLUDING PARENT STOCK)

PROS:

- Quarantine period covered in incubator unit (3 weeks in incubator + rearing);
- SHG no longer have either the personnel or the budget for an incubator unit, therefore needs to be outsourced to the private sector. Low cost to SHG;
- Eggs per se relatively good value and freight costs should be similar to day-old-chicks (but note wastage under CONS);

CONS:

- Quarantine period requires SHG involvement through supervision +/- facilities (Ruperts);
- Requires incubator/brooder facility with associated costs;
- Prolonged commitment of resources compared to day-old-chicks as have to incubate (3 weeks) then rear (4 weeks+);
- High wastage. Eg: 1,000 eggs result in only 250 pullets (50% hatch rate, 50% of chicks are male and culled);
- Therefore need high incubator capacity with all associated costs;
- If outsourced, creates a monopoly and single point of weakness in the supply chain;
- Eggs need to be flown in or fertility is lost, therefore more prone to destruction through bad handling (previous experience).

6. IMPORTING EMBRYONATED EGGS FOR INCUBATION - PARENT STOCK

(Explanatory note: parent stock are the generation before the commercial egg layers. They produce colour coded chicks so that males can be removed, leaving the commercial egg laying females for rearing. They can therefore produce replacement egg layers over their commercial lifetime of 72-90 weeks of age)

PROS:

- Quarantine period covered in incubator unit (3 weeks in incubator + rearing);
- SHG no longer have either the personnel or the budget for an incubator unit, therefore needs to be outsourced to the private sector. Low cost to SHG;
- Eggs per se relatively good value and freight costs should be similar to day-old-chicks (but note wastage under CONS);
- Production of parent stock, then distributed to key commercial producers, allows producers to replace their pullets at an even rate over a prolonged period (compared to occasional imports of day-old-chicks);
- Distribution of parent stock to multiple producers spreads risk;
- A relatively small number of parent stock can produce many egg laying pullets.

CONS:

- Quarantine period requires SHG involvement through supervision +/- facilities (Ruperts);
- Parent stock have to be reared to 5-6 months before egg laying, and then another 5-6 months before the first eggs become productive pullets. Initial delay in egg supply of approx. 1 year;
- Parent stock require incubation facilities throughout their productive lifetime in order to supply pullets. Need producers to engage for this to succeed;
- Eggs need to be flown in or fertility is lost, therefore more prone to destruction through bad handling (previous experience);
- Companies are protective of their parent stock and sourcing may be difficult.

Assessment/Decision Criteria:

- Ease of implementation;
- Cost to SHG;
- Use of resources;
- Efficiency/speed;
- Impact on economy;
- Risk of not achieving the policy objective.

B: DISTRIBUTION OPTIONS

1. FIRST COME FIRST SERVE

Description: ANRD advertises and asks the public to register their interest and makes up a list. Order are then satisfied on a first-come-first-serve basis with no discrimination between commercial enterprises and smallholders.

PROS:

- All have the opportunity to replace their stock, as in normal market economies;
- Creates an informal non-commercial market in eggs alongside the formal

commercial market, resulting in more widespread availability and affordability;

- Laying hens and therefore eggs – a rich dietary staple –become available to low income households without need to utilise their disposable income;
- Democratic and therefore less political, minimising government manipulation of the egg market.

CONS:

- Members of the EPG have indicated that they will pull-out of egg production if the wider public are supplied with more hens;
- People tend to over-order, potentiating the risk of an egg surplus;
- Possible egg surplus depressing prices below commercial levels;
- ANRD may be subject to criticism by commercial producers.

2. ONLY IMPORT FOR COMMERCIAL PRODUCERS

Description: Only those producers with over a certain number of chickens may place an order for replacements e.g. those with more than 50 hens.

PROS:

- Ensures the larger commercial producers can turn over their layers with minimal competition from smallholders;
- Ensures commercial producers have greater control of the retail market, thus improving their profitability and viability.

CONS:

- An applicant categorised as commercial might order a larger number of chicks and then sell on in smaller numbers for a profit;
- Creates an oligopoly of egg producers that control hen ownership and the supply and distribution of eggs, and may therefore force up prices;
- Danger of undersupplying market resulting in retailers importing cheap fridge eggs, whereas currently import substitution has been achieved;
- Low income households restricted from producing eggs for themselves and must spend disposable income to purchase them.

3. IMPORT FOR ALL BUT WITH DIFFERENT PRICE THRESHOLDS

Description: Chicks are imported for all but sold to commercial producers at a reduced rate, and sold to smallholders at a premium rate

PROS:

- All have the opportunity to replace stock;
- Those with larger units have slightly lower replacement costs to give them a commercial advantage.

CONS:

- A premium rate might still not deter smallholders from over-ordering and may create an egg surplus;
- An applicant categorised as commercial may order a larger number of chicks and then sell on in smaller numbers at an increased price to reap an immediate profit.

Assessment/Decision Criteria

- Ease of implementation;
- Relative revenue for SHG;
- Degree of government intervention in market;

- Impact on economy;
- Risk of not achieving the policy objective.

The Options Reviewed

Option Details	Assessment Criteria					
A: RE-SUPPLY OPTIONS						
OPTION 1: Do nothing ie: Status Quo	<i>Criteria 1</i> Ease of implementation	<i>Criteria 2</i> Cost to SHG	<i>Criteria 3</i> Use of resources	<i>Criteria 4</i> Speed/efficiency	<i>Criteria 5</i> Impact on economy	<i>Criteria 6</i> Risk of Not Achieving the Policy Objective
Assessment Against Criteria	++++	0	0	+++	Negative xxx	0
OPTION 2: Day old chick imports via private sector	<i>Criteria 1</i> Ease of Implementation	<i>Criteria 2</i> Cost to SHG	<i>Criteria 3</i> Use of resources	<i>Criteria 4</i> Speed/efficiency	<i>Criteria 5</i> Impact on economy	<i>Criteria 6</i> Risk of Not Achieving the Policy Objective
Assessment Against Criteria	++	+ (depends on degree of subsidy)	++	+++	Positive ++	+
OPTION 3: Day old chick imports via ANRD	<i>Criteria 1</i> Ease of Implementation	<i>Criteria 2</i> Cost to SHG	<i>Criteria 3</i> Use of resources	<i>Criteria 4</i> Speed/efficiency	<i>Criteria 5</i> Impact on economy	<i>Criteria 6</i> Risk of Not Achieving the Policy Objective
Assessment Against Criteria	+++	+++ (depends on degree of subsidy)	+++	+++	Positive +++	+
OPTION 4: Importing point-of-lay pullets	NOT CURRENTLY POSSIBLE	NA	NA	NA	NA	NA
OPTION 5: Importing embryonated eggs for incubation (excluding parent stock)	<i>Criteria 1</i> Ease of Implementation	<i>Criteria 2</i> Cost to SHG	<i>Criteria 3</i> Use of resources	<i>Criteria 4</i> Speed/efficiency	<i>Criteria 5</i> Impact on economy	<i>Criteria 6</i> Risk of Not Achieving the Policy Objective
Assessment Against Criteria	+	++ (depends on degree of subsidy)	+	++	Positive ++	++
OPTION 6: Importing embryonated	<i>Criteria 1</i> Ease of	<i>Criteria 2</i> Cost to SHG	<i>Criteria 3</i> Use of resources	<i>Criteria 4</i> Speed/efficiency	<i>Criteria 5</i> Impact on economy	<i>Criteria 6</i> Risk of Not Achieving

eggs for incubation - parent stock	Implementation					the Policy Objective
Assessment Against Criteria	+	++ (depends on degree of subsidy)	+	+	Positive ++	+++

Option Details	Assessment Criteria					
B: DISTRIBUTION OPTIONS						
OPTION 1: First come first serve	<i>Criteria 1</i> Ease of implementation	<i>Criteria 2</i> Relative revenue for SHG	<i>Criteria 3</i> Degree of government intervention in market	<i>Criteria 4</i> Impact on economy	<i>Criteria 5</i> Risk of Not Achieving the Policy Objective	
Assessment Against Criteria	++++	+++	0	+++	0	
OPTION 2: Only import for commercial producers	<i>Criteria 1</i> Ease of implementation	<i>Criteria 2</i> Relative revenue for SHG	<i>Criteria 3</i> Degree of government intervention in market	<i>Criteria 4</i> Impact on economy	<i>Criteria 5</i> Risk of Not Achieving the Policy Objective	
Assessment Against Criteria	+++	++	++	++	+	
OPTION 3: Import for all but with different price thresholds	<i>Criteria 1</i> Ease of implementation	<i>Criteria 2</i> Relative revenue for SHG	<i>Criteria 3</i> Degree of government intervention in market	<i>Criteria 4</i> Impact on economy	<i>Criteria 5</i> Risk of Not Achieving the Policy Objective	
Assessment Against Criteria	+++	++++	+++	+++	+	

Section 4: Impact Analysis (Proposed Approach)

4.1 The Proposed Approach From The Options Considered

The best option to address the problem/opportunity identified and the costs involved:

- Best option to support policy:
 - Resupply option: OPTION 3: **Day old chick imports via ANRD**
 - Distribution option: OPTION 3: **Import for all but with different price thresholds**
- Costings:

Projected Costing for 1,000 day old Dekalb-Amberlink Chicks During 4 weeks Quarantine			
	Unit	Unit cost	Total Cost
Feed cost	20	£32.00	£640.00
Electricity	1120	£0.46	£515.20
Water	36	£2.02	£72.72
Labour TOIL			£1,271.59
Transport daily	30 days		£491.40
Transport TOIL	30 day		£96.00
cost of 1000 chicks			£580.58
Payment to agent			£560.57
Sawdust	20	£30.00	£600.00
Miscellaneous cost			£100.00
Total			£5,129.03
Cost per chick			£5.13

- *Revenue to SHG:* Depends on proportion of commercial producers to smallholders and exact pricing scheme.

Example: On basis of 50% subsidy to commercial producers and full cost recovery to smallholders, plus a basic assumption of 50% sales to each category:

- Commercial egg producers @ subsidised rate of £2.50/chick. 500 chicks x £2.50 ea = £1,250.
- Smallholders @ cost recovery rate of £5/chick. 500 chicks x £5 ea = £2,500
- Total revenue to SHG = £1,250 + £2,500 = £3,750

It may be the opinion of the Committee that all applicants should receive a subsidy, but with a price differential, and this can be adjusted accordingly.

- *Net cost/revenue:* The cost to SHG of 1,000 chicks is £5,129.03, revenue (est) £3,750. Net cost to SHG in this example is £1,379.03
- *Is this the cheapest option?* Probably. The guaranteed cheapest option for SHG budget is OPTION 1: Do nothing. But this has a negative impact on the economy in several ways listed above, and does not achieve objectives of the SEDP. Other options also involve greater expense, as well as having negative impacts on the economy.
- *Does it address the problem?* It is the best compromise. The smoothest and best option is to have

parent stock on island with a private sector incubator unit, producing pullets at a steady supply rate. However, this has been tried with the contracting out of the ANRD poultry unit, and did not succeed. Also there is no appetite currently amongst the commercial egg producers to take this on afresh (results from stakeholder meeting). Importing 1,000 chicks at a time is 'lumpy', but cost effective.

4.2 Other Impacts This Proposed Approach is Likely to Have

Other impacts the proposed option is likely to have for the Island, stakeholders etc:

- Egg supplies are still likely to wax and wane according to the maturity of each batch of imported chickens. This occurs however anyway as these commercial egg layers are not kept in true commercial conditions of controlled lighting and temperature, so production variations occur with the changing of the seasons.
- The policy of a pricing differential satisfies a number of requirements: (a) Chicks are made available to all – politically democratic and acceptable. (b) Subsidised rates to commercial producers support their business viability. (c) Egg supplies are maintained for all households, including lower income, and are not just restricted to retail outlets. (d) Positive impacts on the economy as previously listed, such as import substitution, providing a healthy dietary staple, creating local income etc.

Section 5: Stakeholder Views

5.1 Stakeholders Thoughts and Comments About the Problem/Opportunity and the Proposed Solution

Commercial egg producers (attendance 14) were given a Powerpoint presentation of all options, with an extensive Q & A session and discussion of all issues on 16th April 2020.

Retailers were also contacted regarding monthly sales, with results as follows:

QMS:	120 dozen
Thorpes:	115 dozen
Solomons:	1,322 dozen
<u>TOTAL:</u>	1,557 dozen/month

This translates to 622 eggs/day. Known worldwide per capita daily egg consumption is a good guide to how many eggs are provided by the informal market, who have not been consulted, as follows:

Japan (highest)	0.88 eggs per capita per day
China	0.84 eggs per capita per day
USA	0.72 eggs per capita per day
UK	0.54 eggs per capita per day

Even if the per capita daily egg consumption was lower than the UK at 0.5 eggs per capita per day, this would require at least 2,000 eggs per day for a population of 4,000. It is a fair and likely assumption therefore that the informal market (and the smaller retail outlets) normally account for 3/4 of egg supplies.

- *What is the nature of their interest?*

Egg producers seek business viability and a regular supply of replacement pullets. Retailers seek a profit margin and a regular supply of local eggs. The general public seek a regular supply of a healthy staple food at an affordable price.

- *Do they agree with our analysis of the problem and its causes?*

Egg producers do, particularly in regard to the costs and commitment required for private sector involvement in the supply of pullets, for which there was little appetite.

- *Do they agree with our proposed approach?*

Egg producers do, unanimously. In particular, they did not want a private sector operator to control pullet supplies (controlling who receives and at what price etc), but preferred the fair system applied by ANRD. They also – perhaps surprisingly - favoured chickens being available to all, not just commercial producers.

- *Has our proposed approach been modified as a result of stakeholder feedback? If so, how?*

It has. Although egg producers favour chicks being made available to all, they also favour the distribution price differential, as recommended above. This approach appeared non-controversial and unanimous.

Section 6: Policy Implementation and Operation

6.1 The Policy Arrangements and How They Will be Given Effect

- How the proposed approach will be given effect:
 - *Policy procedures.* Day-old-chicks will be purchased, flown in, and quarantined as before, and on a regular replacement basis such at 8-10 months. Commercial producers will be defined as those ordering 20 chicks or more. Although this number may seem low, it was achieved after discussion at the egg producers meeting. It is sensibly based on the fact that a commercial producer should not be replacing all of their stock each time, but - in order to smooth out egg production - a percentage eg: 25%-33%. Thus 20 pullets might represent someone who has 60-80 chickens.
 - *Communications.* The public will be advised beforehand, and asked to fill in an application for chicks. These will then be categorised as ‘commercial’ and ‘smallholder’, and listed on a first come/first serve basis.
 - *Any transitional arrangements required?* None.
- *Once implemented, who will be responsible for ongoing operation and enforcement of the policy arrangements?* Andy Timm ADO, Jonathan Hollins SVO, and Rebecca Lawrence VO.
- *When will the new arrangements come into effect? Does this allow sufficient preparation time for affected stakeholders?* There is a demand for replacement pullets now, but resupply will be delayed by the current COVID-19 pandemic. There is sufficient time for stakeholders to be prepared.
- *How will any implementation risks be managed or mitigated?* As problems arise, we will manage them. This procedure has been carried out on 4 previous occasions, the only difference is the use of a price differential.

Section 7: Monitoring, Evaluation and Review

7.1 Monitoring the Impact of the Proposed Policy Arrangements

- *How will we know whether the impacts anticipated actually materialise?*
By monitoring egg availability, egg prices and holding stakeholder meetings.

- *Current monitoring and evaluation*

- *Are there already monitoring and evaluation provisions in place for the system being operated?*

Monitoring is qualitative rather than quantitative because of the severe limitations on data collection as all the chicks go out into the private sector. There is no legal basis to compel private stakeholders to provide or return data.

7.2 Reviewing the Proposed Policy Arrangements

The success of resupplying and distribution will be reviewed after the first and any repeat events have been completed.

- *What sort of results (that may become apparent from the monitoring or feedback) might prompt us to have an earlier review of the approach proposed?*
 - Public dissatisfaction with the process.
 - Imports of eggs.
 - Egg surplus or deficiency.

- *What opportunities will stakeholders have to raise concerns?*

Feedback is always encouraged on a day-to-day basis. In addition there will be regular meetings of the Egg Producers Group.

Section 8: Policy/Policy Procedures

8.1 Policy and or Policy Procedures

The procedures below to be adopted to allow the option to be implemented.

Summary of procedure:

- Arrange export with producer (not always available) for 1,000 day old chicks (capacity)
- Advertise to general public, first come first serve
- Format list of applications into commercial/smallholder
- Tally numbers and adjust order or applications accordingly
- Import day old chicks
- ANRD to manage 4 weeks quarantine at Ruperts quarantine station
- Issue chicks with a price differential according to commercial/smallholder
- Repeat procedure at regular supply intervals eg: every 8-10 months (to be determined)

Section 9: Policy Responsibility

Responsible Policy Manager	(Signature and Date):
Darren Duncan	

List of Stakeholders Consulted

A meeting was held on 16 April 2020 at the Kingshurst Community Centre to consult with the Commercial Egg Producers on options for the importation and distribution of day old chicks.

25 producers were invited and these were selected from the list of producers who brought chicks from the four batches that ANRD imported.

Producers invited were;

Cyril Fowler
Arthur Osborne
Ricky Andrews
Geoffrey Bowers
Andrew Constantine
Tony Leo
Graham Leo
Anita Isaac
Melvin Benjamin
Elvis Fowler
Larry Thomas
Peter Wilmot
Belfred Knipe
Lynton Stevens
Roddy & Debbie Yon
Diana Chambers
Trevor Furniss
Maureen Jonas
Steve Biggs
Gourange Thomas
Robert Augustus
Melvin Obey
Michael Coleman
Darren O'Dean
Norman Benjamin
Ken Stevens

Apologies received from 3 producers, and below are those who attended and participated in the discussion;

Trevor Furniss
Gourange Thomas
Melvin O'Bey
Roddy Yon & Debbie Yon
Tony Leo
Andrew Constantine,
Graham Leo
Darren O' Dean
Steve Biggs
Maureen Jonas
Lynton Stevens
Cyril Fowler
Robert Augustus

Egg Import Data

Annual Egg Imports by quantity (Source: Solomon's & Co PLC and WA Thorpe's and Sons)

Year	Number of eggs imported
2015	215,370
2016	242,562
2017	73,788
2018	46,320
2019	17,280

Egg Demand Data from Key Merchants (Their Average Monthly Requirements)

QMS: 120 dozen
Thorpes: 115 dozen
Solomons: 1,322 dozen