

# Royalty Collection Method for Cereals

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# Cereal Consortium

## Steering Committee Representatives

- Alberta Barley Commission
- Alberta Seed Growers Association
  - Alberta Wheat Commission
    - Grain Growers of Canada
  - Keystone Agricultural Producers
- Manitoba Wheat and Barley Growers Association (Interim)
  - Manitoba Seed Growers Association
  - Western Barley Growers Association
  - Western Canadian Wheat Growers
  - Western Grains Research Foundation
  - Saskatchewan Seed Growers Association
- Saskatchewan Wheat Commission (Interim/Observer)
- Saskatchewan Barley Commission (Interim/Observer)

# Project Purpose

- **To develop a cereal variety development model for wheat and barley that involves partnerships with producers.**
- **To recommend a royalty collection best suited for wheat and barley.**
- **Today's focus is on the recommended royalty collection method.**

# Scope of Work

- **We studied systems in France, Australia, Uruguay and Argentina.**
- **On-site visits occurred.**
- **Work was focused on both variety development models and funding methods.**

# Guiding Criteria

- **To identify a funding method that would appropriately capture the royalty due every time a wheat or barley seed is sown.**
- **Recognized that Farm Saved Seed will continue to be used by farmers.**
- **Will not control where others collect royalty (on seed or grain) or how much is charged.**
- **Will not change the Seed Act. (maintains the integrity of the pedigreed seed system)**

# Guiding Criteria-continued

- **Have a high degree of efficiency.**
- **Have a low cost of administration.**
- **Is performance-based. i.e. each variety can have its own royalty rate based on value.**
- **Allows the breeder to decide if a royalty is charged and if so, how much.**

# France

- **Not a UPOV 91 system but in accordance with a EU System.**
- **Royalty on Certified Seed and a levy on wheat production.**
- **Breeder negotiated a levy on soft wheat only.**
- **1,200 delivery points receive the grain.**
- **The levy on wheat production is used to provide a Return on Investment (ROI) on Farm-Saved Seed (FSS).**



# France

- **15% of the levy goes to research projects of national interest. 85% goes to the breeders based on certified seed market share.**
- **Limagrain is the world's largest wheat breeder. It is a cooperative with farmer input through the Board.**
- **Four years ago, the Limagrain Board decided to go global on wheat breeding. It established investments in Australia, United States and Argentina.**
- **Limagrain decided to invest in Australia first because it could see ROI – now very profitable.**
- **Limagrain reinvests 30% of royalties into breeding.**

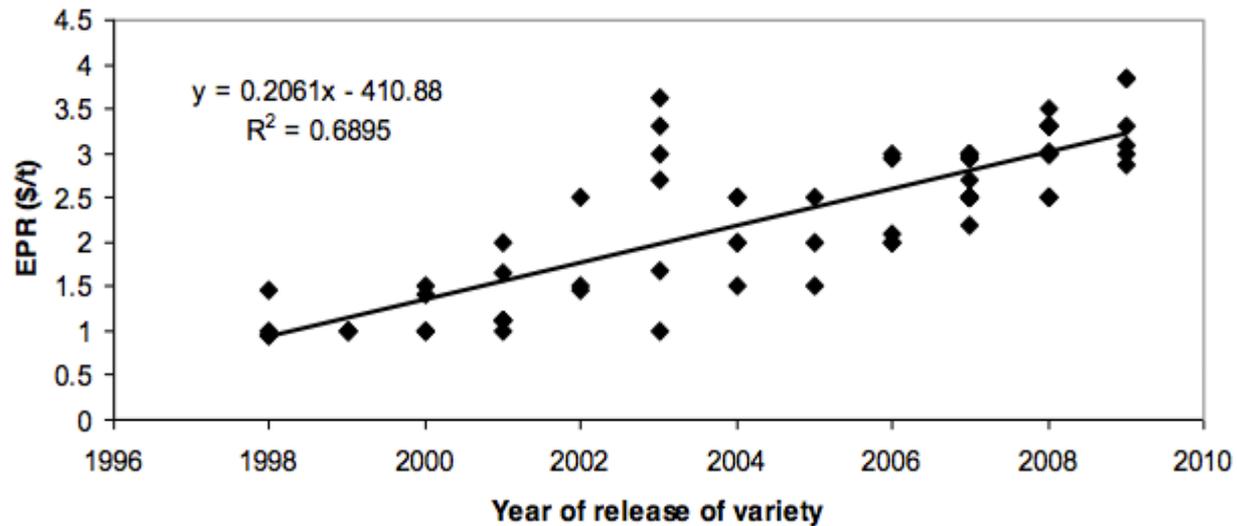
# Australia

- **Australia has used the End Point Royalty system since 1998.**
- **Grain companies receive a fee for deducting the royalty.**
- **Breeders are satisfied with the effectiveness of the system to collect royalties due.**
- **High degree of general satisfaction with the system from most stakeholders.**
- **Some global breeders report that the ERP was a main factor for their investment in Australia.**

# Australia

- **The seed industry and seed marketers have not been adversely effected by the EPR.**
- **Australian seed growers have generally aligned with breeding companies.**
- **Much higher rate of new variety release and variety turn over, therefore greater opportunities for seed sales**
- **Average time from first cross to commercial variety release pre- 2002 was 13 years (11-15 years)**
- **Average time from first cross to commercial variety release now is 9 years (7-11 years)**
- **No seed royalty so growers tend to purchase larger volumes of seed**

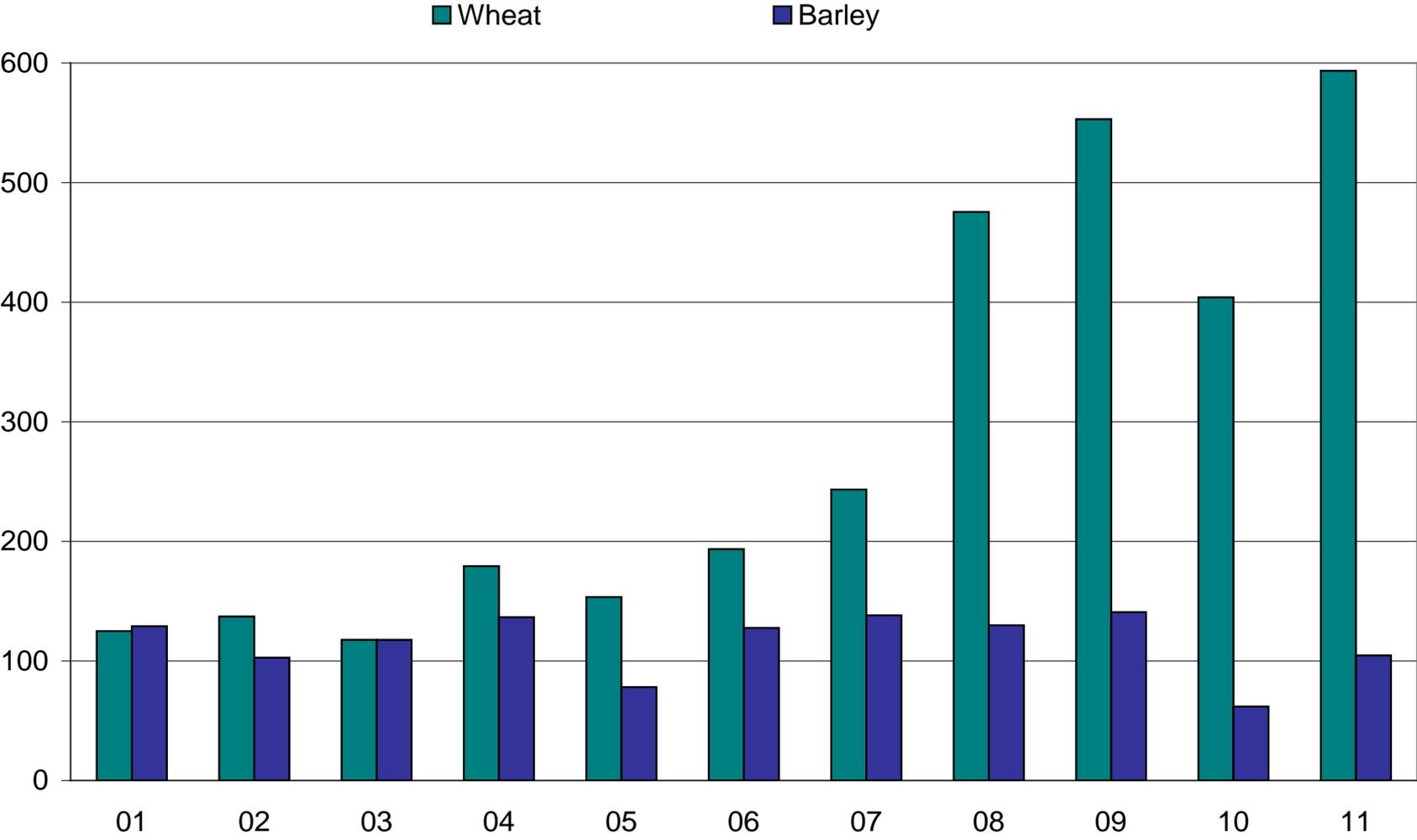
# Australia - EPR and Year of Release



**Fig. 3.** The relationship between the end point royalty rate of varieties and their year of release

# Uruguay

# Uruguay - Winter Crop Areas 2001 – 2011 (th ha)



# Uruguay

- Has an high level of royalty collection based on royalty collection on seed and on-farm saved seed.
- Most varieties originate from breeders in Argentina who have organized URUPOV to gain information for royalty collection.
- URUPOV collects the information needed by breeders to invoice producers for royalties due and to enforce royalty collection.

# Uruguay-continued

- Two (2) on farm visits by URUPOV personnel occur each year.
- First, to record amount of seed held in storage planned for next planting.
- Second, to record the amount actually used for planting.
- System works well because of the small geography where grain is grown and the relatively small number of producers.

# Uruguay

## On- Farm Royalty Monitoring



# Argentina



- **Certified Seed (37%), F.S.S. (40%) and Brown Bag (Illegal Sales 23%).**
- **Argentina lacks the legal capacity to enforce the extended royalty option for farm-saved seed.**
- **Argentina breeders produce varieties for Argentina and Uruguay.**
- **French germplasm was introduced 10 years ago. This increased the yield by a major amount, however there is a low disease resistance.**

# Argentina



- **Monsanto is said to prefer the EPR system for South America. (most of the soybean are exported)**
- **Monsanto is pushing hard to change the Seed Act so that it can collect royalties on F.S.S. soybean (Extended Royalty System)**
- **Within a month or two, the law may be changed. The proposed legislation is waiting approval.**
- **Argentine policy has reduced wheat production because it has limited wheat exports to ensure a domestic supply. Nevertheless, Syngenta, Limagrain and KWS are making major investments in breeding facilities and programs.**

# Recommended Funding Mechanism

An End-Point Royalty (EPR) collection method appears to be the best fit for royalty collection on cereals produced in Canada for the following reasons:

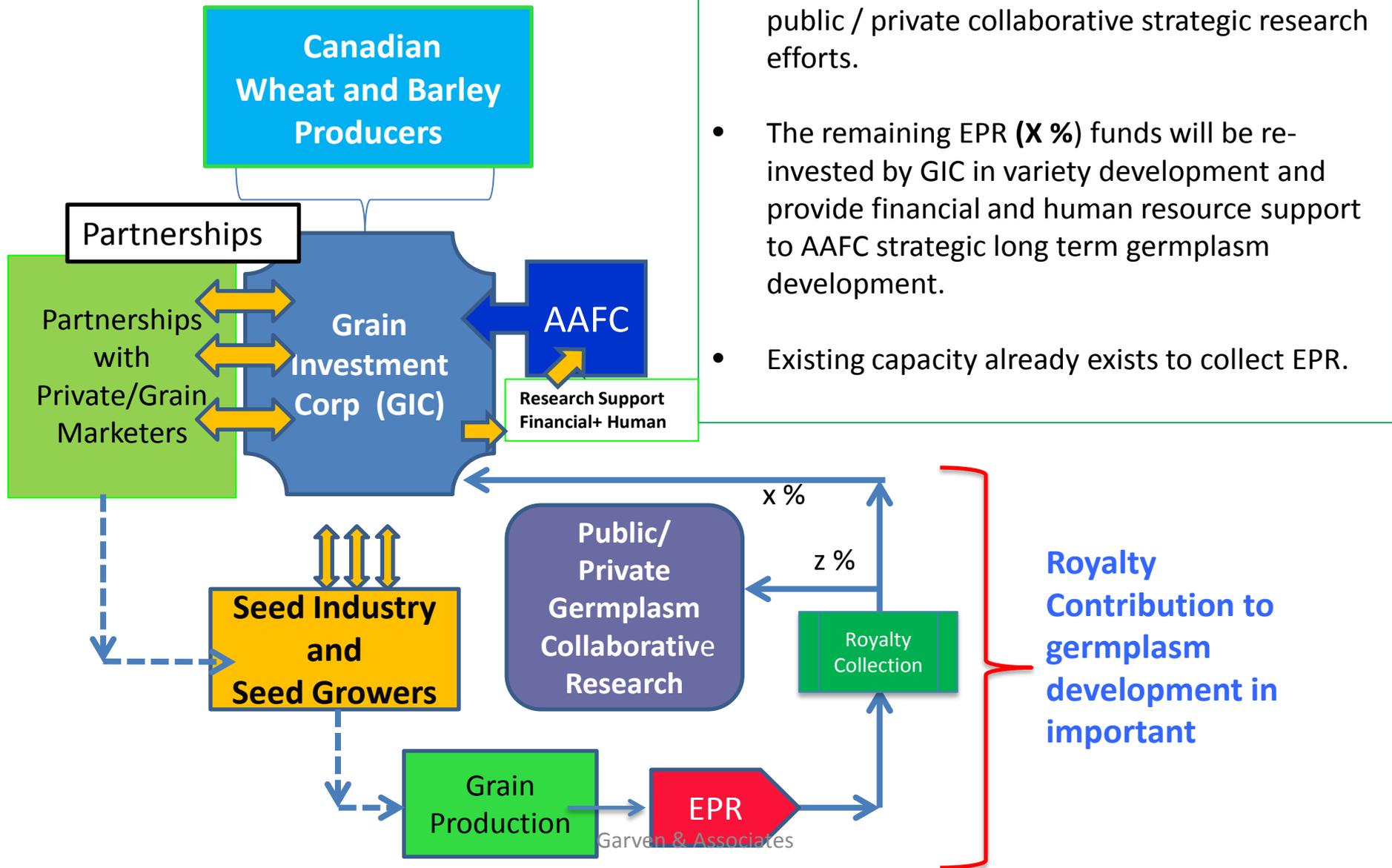
1. Most of the cereal grain is sold through a relatively small number of buyers.
2. Buyers have established the administrative systems for collection and remittance of levies based on grain sales.
3. It has a low administration cost.

# Recommended Funding Mechanism

An End-Point Royalty (EPR) collection method appears to be the best fit for royalty collection on cereals produced in Canada for the following reasons:

4. Less offensive to producers than a collection/monitoring system that is needed for FSS.
5. Performance-based royalty system.
6. Producers and breeders share risk of variety performance.
7. Transfer of royalty from seed to grain should lower certified seed prices leading to increase in usage.

# Investment and Innovation Model Concept



# **Royalty Collection Method in Canada- Expected End Results**

- 1. Will increase dollars invested in germplasm development.**
- 1. Provides a method and funds to ensure that adapted germplasm continues to be enhanced– making it available for game-changing technology as and when it is available.**
- 2. Contributes to an improved method of addressing FSS’s payment for technology– by EPR and changes mind-sets.**
- 3. Contributes to a stronger environment for a return on investment to cereal breeding research.**

# Key Conclusions - Globalization

1. Wheat is the most important crop in the world.
2. Within the last five years, major breeders have developed a global strategy to wheat breeding.
3. Global breeders are purchasing or partnering to gain access to adapted germplasm in all continents (Eastern Europe/Ukraine; Australia, South America and U.S. (Land Grant Universities – Kansas State, Nebraska, North Dakota and South Dakota)).
4. Breeding programs are shifting from regional to global in nature.

# Conclusions

*“Where farmer saved seed is common practice, the characteristics of end point royalties are shown to make them a preferred means for financing crop breeding by variety developers, governments and many grain growers.”*

Ross Kingwell, Australian Export Grains  
Innovation Centre and University of Western  
Australia, Working Paper 2011/4

# Conclusions- continued

- **Australia provides the proof that an EPR works very well.**
- **All the major global breeders have chosen to invest there- some report because of the EPR.**
- **Under the rights circumstances, Canada can adopt an EPR system and have even a better system than Australia.**
- **Canada can....**
  - **Continue with a pedigreed seed system.**
  - **Continue with a shared contribution in cost from grain companies who deduct the EPR but who also benefit from the benefits of new varieties.**
  - **Build in a means for the royalty to fund germplasm development so all can benefit. Sustains AAFC funding.**

# Summary

- On Balance .....
- An end point royalty (EPR) system for wheat and barley seeds in our view is the best royalty collection method for Canada if the breeder allows the seed to be re-planted by the producer.
- In cases, where a crop is planted only once, an EPR would work as well.
- An EPR has significant efficiencies and cost saving relative to alternative methods.

# Summary-continued

- No apparent harm or negative affect appears to result from the EPR.
- Role of seed companies can increase because they can provide the services as royalty collection managers.

# Considerations

- After discussions, questions and answer periods with over 300 individuals.....
- .... And 200 hours of discussion.
- .... It is evident that the terminology and royalty collection methods are not clearly understood by most stakeholders.
- Considerable communication efforts will be needed to effectively transition to any new system.