WORKING WEEK 2025
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Collaboration, Innovation and Resilience: Championing a Digital Generation
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The RATIONALE for Using Simulation (Sim) in Land Admin (LA) & Development Assistance (DA)

& A PLAN to build *Capability & Capacity*

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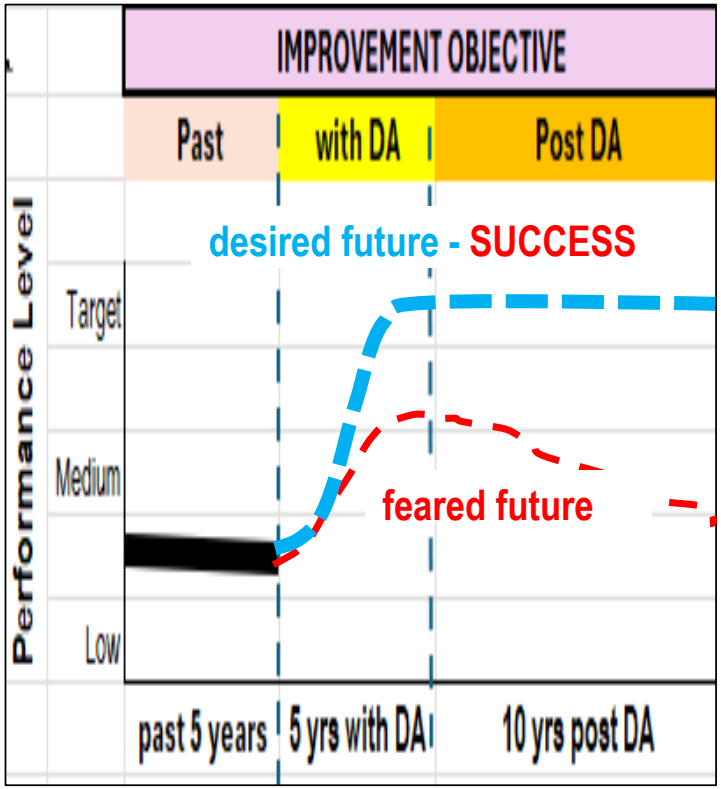
Abbreviations Used

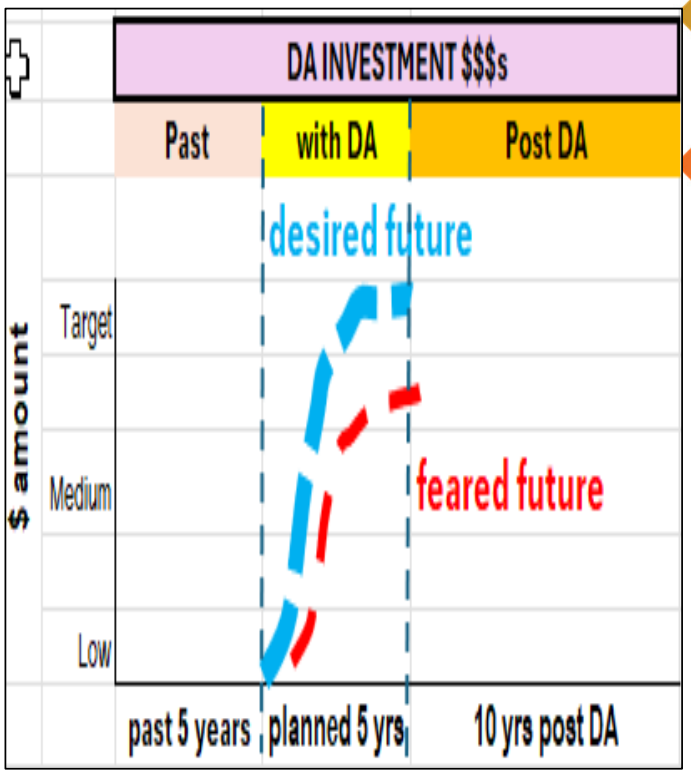
Sim	Simulation
SD	**Strategy Dynamics – the Sim method used**
IC	In Country
LA	Land Admin – Land Administration
DA	Development Assistance

SUCCESS in Land Admin (LA) with (DA) *is considered to be*

	The OBJECTIVE	With WHAT	For How Long
1	*Achieving* improvements	LOTS DA $$$$	3-5+ years
2	*Sustaining* improvements	Small in country $s	10-15+yrs, post DA

a Performance Over Time (POT) view of *SUCCESS* & *less than successful*

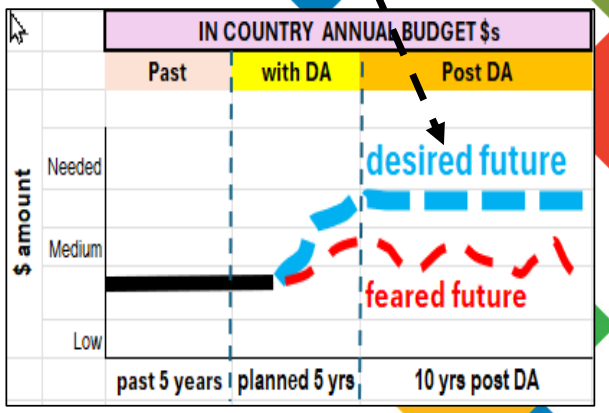




The % increase required in IC budget/yr to SUSTAIN improvements is significant

a Financing Plan (IC post DA) needs to be determined & incl in Design

Recent Land Portal Webinar noted more attention needed on HOW to finance sustainability



WHAT SIMULATION (SIM) IS - WHAT USED FOR - WHERE USED

Sim IS - using models to represent real-world systems & process

Sim Used TO - *TEST* plans for efficacy BEFORE investing

Bench testing proposals for improvement

Provide great insights

Sim Used IN

- **Developed economies**
- **Development Assistance** (DA), in **some non-LA areas** - Millennium Institute, Earth4All, Nag (2024)
- **Applicability of SD to LA/DA has been shown** – Lyons (2022,2023)

STRATEGY DYNAMICS (SD) - KEY CHARACTERISTICS for Land Admin & DA

11 in paper – 5 here

1. **Takes a "*systems*" view** rather than a *symptoms* view
2. **Development logic explicit & *quantitative*** with POT graphs – (handles indirect cause & effect)
3. **Handles Time Periods > DA** & allows sustainability to be examined
4. **Incorporates Intangibles** e.g. reputation, morale, quality
5. **Model holds Core of business case** when financials included

SD - a "Ready Reckoner" of "Results" from "testing improvements" as Model built

SD KEY CHARACTERISTICS used in

1. **DESIGN**
2. **IMPLEMENTATION** during & post DA
3. **SUSTAINABILITY** during & post DA

1 – in **DESIGN**

a) **Numerically *test* proposed improvements**, for ***effectiveness*** & ***sustainability***
b) Determine the **conditions for *sustainability, incl financing***

2 –in **IMPLEMENTATION**

a) ***track* actual achievements to targets**
b) **Test corrective actions**

3 – for **SUSTAINABILITY**

a) **Determine Conditions for Sustainability**
b) Include a **sustainability plan in the Design docs**
c) **Monitor sustainability KPIs**

PROPOSITIONS for DISCUSSION - 9 in Paper - 6 here

1- A **major use** is to **design for SUCCESS** – **achieving & SUSTAINING** improvements post DA

2 – **Better to design for what can be sustained, post DA, than what can achieve with DA, but not sustain post DA**

3 –**Sustainability enhanced if DA projects were longer & less intense** – **allow more time to build IC capability & capacity**

4 – **Buy in & sustainability increases when IC stakeholders** can **TEST THEIR proposed improvements** – as part of design

5 –**Start by improving an existing operational entity,** a government business- **success will increase revenue to reinvest in sustainability** – if existing cannot be improved significantly, new endeavours likely difficult

6 – **Adds Value to Theory of Change & Logframe** – is **quantitative**; model a digital twin/ **living biz model**; **integral to M&E**

Summary - The RATIONALE for using SD in LA/ DA

Rationale Outlined

1. ***SUCCESS*** **in LA/DA is** ***Achieving*** **&** ***Maintaining*** **improvements**
2. Sim/SD **used to**: - test business plans before investing; explore and better understand complex situations,
3. Sim/SD **used in** some non-LA areas of DA; **Shown applicability to LA**/DA (previous papers)
4. Key **characteristics of SD listed**; ***Propositions for Discussion*** listed

SD provides the Approach & Tools to – (Warren 2019)

1. ***Determine*** **if a** ***Plan*** **will work**
2. ***Design*** **a** ***System*** **so that it can perform well**
3. ***Manage*** **the** ***System*** **so that it does perform well**
4. ***Fix*** **the** ***System*** **if problems occur**

Questions for Discussion

1. As Sim **is used** to test plans **in other areas, why not use/trial in LA & DA?**
2. **Is LA so different** from other areas, that Sim **is not applicable?**
3. **If so, Why?**

A PLAN to BUILD *CAPABILITY* and *CAPACITY*

to use SD operationally

Serious Challenges – Ways to Overcome

	Major Challenges	Ways to Overcome
1	SD largely unknown in LA/DA community	Establish core group to champion SD in LA/DA
2	Few Unis cover LA/DA -none cover SD	A Uni Dept to be active in SD as well as LA/DA
3	Lack of project designs using SD to compare to other method	• DA agency provides projects for education purposes • Do a comparison design & evaluate
4	DA agencies have own procedures for all DA areas	• Show how SD can add value & fit into procedures of DA agencies • Gain support of DA agencies funding LA

the PLAN

Stage 1- Core Group to Drive SD for LA formed & Active

Stage 2- Build *Capability* to deliver knowledge/ skills in SD for LA

Stage 3 -Increase *Capacity* to use SD in LA operationally

Stage 4 –Operational use of SD in LA under way

Milestones

1. A **Uni Dept agrees to offer SD for LA/DA**
2. **A DA agency agrees to provide past project/ data**

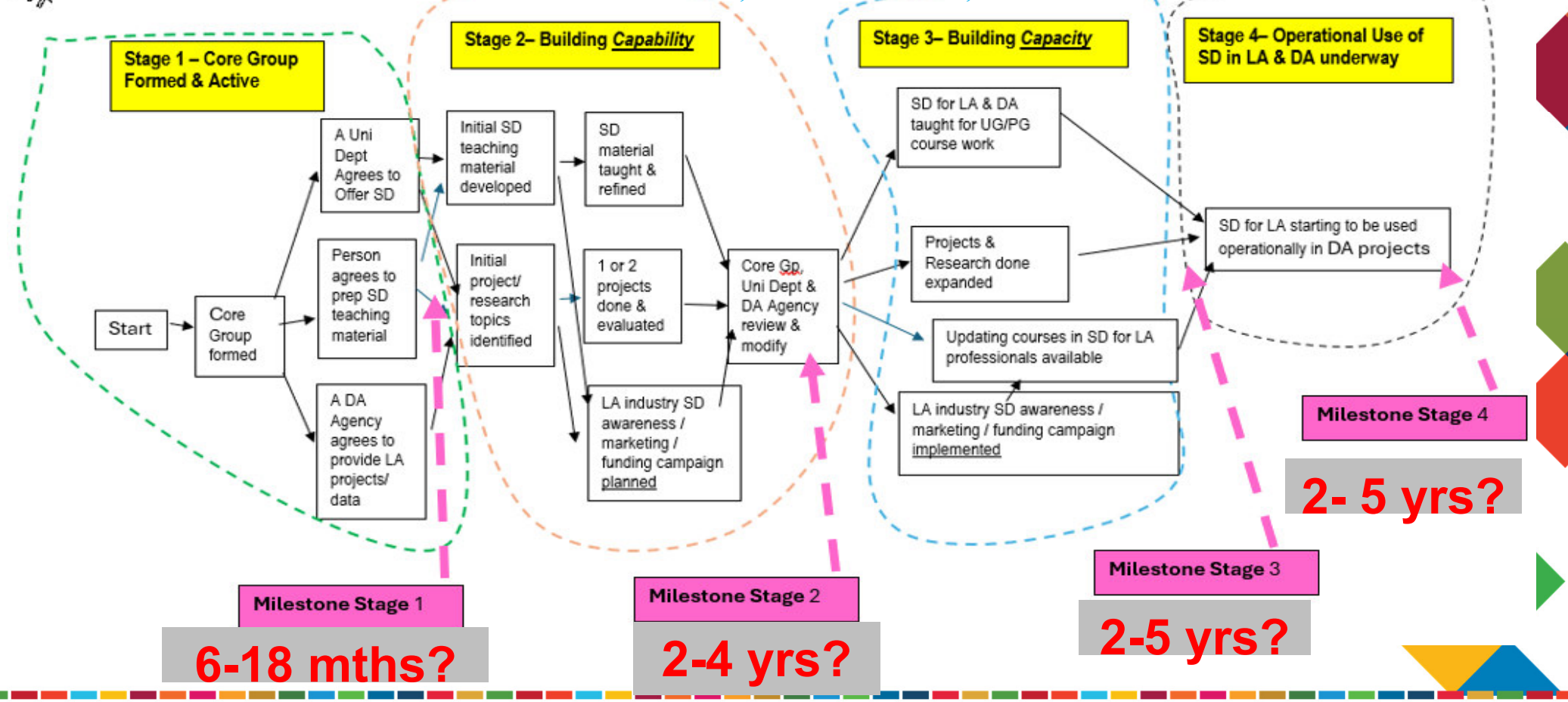
1. **SD teaching material developed**
2. **projects/research conducted** by Uni & DA agency
3. **A core with expertise in SD for LA/DA is built**

1. **Increased uni students graduate with SD knowledge/ skills**
2. **LA/DA professionals do SD courses** online
3. IC LA agencies staff do SD courses
4. **DA agencies employ those with SD skills**

SD being used in operational projects

TASKS to be done

A NETWORK DIAGRAM, MILESTONES, DURATIONS



MILESTONES & CRITICAL SUCCESS FACTORS

Stage 1 – Core Group Formed & Active

Milestone (MS) 1
1. A Uni Dept agrees to offer SD for LA with DA
2. A DA Agency agrees to support & provide past projects & data

Critical Success Factors (CSF)
1. **A Core Group "volunteers"** to drive SD for LA
2. **Core group is successful in achieving MS1** (getting a Uni Dept & a DA Agency involved

If Stage 1 fails, Plan fails

Stage 2 – Build *Capability* in SD for LA/DA

Milestone (MS) 2
1. Teaching material developed
2. Projects/ research conducted

Critical Success Factors (CSF)
1. Uni Dept productive
2. DA Agencies see Value & Support
3. Capability is successfully marketed

Stage 3 – Build operational *Capacity* in SD for LA

Milestone (MS) 3
1. Uni students graduate with SD/LA/DA skills
2. LA/DA professionals & IC Agency staff do online courses
3. DA Agencies employ those with SD skills

Critical Success Factors (CSF)
1. Uni attracts students, projects
2. More DA Agencies Support & employ those with skills
3. Marketing continues & is successful

IS USING SD WORTH DOING?

REWARDS

- **Higher quality designs**
- **Increase** in **targets being achieved** & **sustained**
- **Decrease** in **DA investment decaying** & needing future reinvestment
- **Increased numbers** with **SD/LA skills**
- **Increased IC** Agency with **SD/LA capability –** less need for DA

EFFORT

- **Going up the SD learning curve**
- To **execute "The Plan"**

Belief SD for LA is worth doing

IN CONCLUSION - Questions for Discussion

1. **WHY NOT use SD in LA/DA?** -is used in other areas
2. **Is LA so different** that SD is not applicable?
3. If SD not applicable to LA, **WHY?**

THANK YOU

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The most relevant SDGs related to the presentation and theme of this session

1st relevant SDG

2nd relevant SDG

3rd relevant SDG

<u>Land Tenure Security is the 12th most efficient solution of the SDGs,</u> with a benefit cost ratio of 21.1
Bjorn Lomborg Copenhagen Consensus Center (2023)

SUSTAINABLE DEVELOPMENT GOALS | International Federation of Surveyors supports the Sustainable Development Goals

STEP 1: SELECT HERE THE THREE MOST RELEVANT SDGs
STEP 2: COPY THE SDG INTO PREVIOUS SLIDE